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STATISTICAL REVIEW
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ENGLAND AND WALES
FOR THE YEAR

1961

PART III
COMMENTARY

LONDON

HER MAJESTY'S STATIONERY OFFICE

1964

TABLE OF CONTENTS

	<i>Page</i>
Explanatory Notes	xiv
Corrections	xviii
INTRODUCTION	1
POPULATION	2
Population growth	3
Births	4
Deaths	5
Natural increase	5
Migration	6
Changes in population structure	8
Sex ratios	9
Age structure	9
Marital condition	10
Future prospects	10
Significance of projections	11
Births	11
Migration	14
Local authority area estimates	15
MARRIAGES	20
First marriages	20
Bachelors	20
Spinsters	23
Minors	24
Remarriages	24
Widowed persons	26
Divorced persons	28
Marriage ages of brides and bridegrooms in combination	29
A projection of future marriages	34
The relation between marriage rates and population structure	38
Total married women of reproductive age	40
Seasonal incidence of marriage	42
Marriage incidence in different parts of the country	44
DIVORCES	45
Parties to whom and grounds on which decrees granted	47
Present ages of parties	48
Duration of marriage and marriage age of wife	49
Marriage ages of husband and wife in combination	50
Previous marital condition by marriage age	51
Children of the marriage	54
WIDOWHOOD	55
BIRTHS	57
Incomplete statement at birth registration	58
Birth occurrences and registration time lag	58
Tabulation basis	58
Illegitimate births and pre-marital conceptions	59
Legitimate births and fertility	63
Age of mother and duration of marriage	63
Age at marriage	64
Age of father	66
Cohort analysis	67
Ultimate family size	69

BIRTHS—(continued)	Page
Replacement	74
Reproduction rates	74
Generation replacement rates	75
Birth order	76
Sex ratio at birth	86
Multiple births	86
Age of mother and legitimacy	88
Monozygotic twins	91
Dizygotic twins	93
Seasonal incidence of births	96
Birth rates in different parts of the country	100
GENERAL MORTALITY	101
Notifiable diseases	101
Cancer	102
Diseases of circulatory system	102
Infant mortality	103
Maternal mortality	103
Road accidents	103
STILLBIRTHS	189
Definition of stillbirth	189
Number of stillbirths	190
Causes of stillbirth	190
Analysis of the causes of stillbirth	193
Characteristics of the mother	194
Maternal age	194
Parity of mother	196
Stillbirths in previous pregnancies (i.e. live or still births)	198
Characteristics of the pregnancy	199
Multiple births	199
Seasonal fluctuations	200
Characteristics of the delivery	201
Geographical differences	201
Place of confinement	203
Duration of pregnancy	205
Birth weight	207
MALIGNANT NEOPLASMS OF THE GENITAL ORGANS ACCORDING TO	209
MARITAL CONDITION	
Cancer of cervix uteri	210
Cancer of corpus uteri	210
Cancer of the ovary	216
Cancer of the testis	218
Cancer of the prostate	221
CARDIOVASCULAR DISEASES	222
Infants	222
Children of pre-school age	223
Children of school age and young persons	223
Young adults	225
The middle aged	225
The elderly	227
General review of cardiovascular diseases	232
Geographical variations	234
Place of death and mode of certification	236
Major trends	236
SUICIDE 1901 to 1961	240
Introduction	240
Suicides and suicide rates by sex and age	243
Seasonal variation	248
Social class variations in suicide rates	252
Regional variations in suicide rates	255
Method of suicide	263
Attempted suicides	264

	<i>Page</i>
MISCELLANEOUS	267
Corrected notifications and deaths from certain infectious diseases	267
Deaths from encephalitis secondary to infectious disease	269
Tetanus	271
Deaths following vaccination or other prophylactic inoculation	272
Deaths connected with administration of anaesthetics	272
Therapeutic misadventures	274
Live births, stillbirths and stillbirth rates by age and parity of mother and place of confinement	291
ADVISORY COMMITTEE ON MEDICAL NOMENCLATURES AND STATISTICS	295
<i>Report (dated March 1963) on the work of the committee for 1960-62</i>	
Introduction	295
Medical Certification of Cause of Death	295
Registration of Causes of Stillbirth	295
Instruction in Certification of Causes of Death	295
National Epidemiology	295
Eighth Revision of International Classification	296
Work of Sub-committees	296
The Cardiovascular Sub-committee	296
The Mental Disorders Sub-committee	296
The Congenital Malformations Sub-committee	296
The International Classification (Eighth Revision) Sub-committee	296
Members of the Committee	297
Members of the Sub-committees	297
GREAT BRITAIN AND IRELAND	300
Vital statistics	300
Population	301
Marriage rates	303
Birth rates	303
Infant mortality rates	303
Cause of death	304
INTERNATIONAL CO-OPERATION IN POPULATION AND HEALTH STATISTICS	305
United Nations	305
Population Commission	305
Commission on the Status of Women	305
Working Group on Electronic Data Processing Machines	306
Conference of European Statisticians	306
Conference of Asian Statisticians	307
Economic and Social Council	307
General Assembly	307
World Health Organization	307
World Health Assembly	307
Technical Conference on the Epidemiology of Mental Disorders	308
European Technical Conference on Mortality Statistics	308
Expert Committee on Health Statistics. Sub-committee on Classification of Diseases	308
WHO Centre for the Classification of Diseases	308
Council of Europe	309
Working Party on Cancer Statistics	309
International Statistical Institute	309
International Congress on Mental Health	309
Visitors from Overseas	309
References	310
THE REGISTRATION SERVICE	311
Searches and certificates	311
Re-registration of births of legitimated persons	312
Adopted children	313
THE NATIONAL HEALTH SERVICE CENTRAL REGISTER	314

	Page
PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS	315
Electoral Registers	315
Total electorate	315
Size of parliamentary constituencies	316
Local government elections	318
Local government elections in urban areas	318
Local government elections in rural districts	318
Elections in different types of local authority	322
Central Index of Service Voters	322

APPENDICES

A.	Fertility by year of marriage, 1920-1961, England and Wales	326
	Table 1(a)-(g). Mean family size	326
	Table 2(a)-(g). Fertility rates	332
B.	Fertility rates by birth order, 1951-1961, England and Wales	338
C.	Persons marrying in 1961 by ages and marital conditions in combination, England and Wales	358

TABLES

POPULATION

I	Estimated population mid-1951 to mid-1961, England and Wales	3
II	Natural increase of the population mid-1951 to mid-1961, England and Wales	5
III	Migration, mid-1951 to mid-1961, to and from England and Wales	7
IV	Proportion married per 1,000 in each age-group, 1931, 1951 and 1961, England and Wales	10
V	Total population, projections from 30th June 1962 by sex and age, England and Wales	12
VI	Distribution of percentage differences between actual and expected population estimates 1961, administrative areas of England and Wales	18

MARRIAGES

VII	Numbers of marriages and marriage rates, 1931 and 1938 to 1961, England and Wales	20
VIII	Proportional distribution of first marriages by age-group per 1,000 at all ages, and average age at marriage, 1931 and 1938 to 1961, England and Wales	21
IX	First marriage rates by sex and age with ratios to those of 1938 taken as 100: 1931 and 1938 to 1961, England and Wales	22
X	Remarriage rates by sex and age with ratios to those of 1938 taken as 100: 1931 and 1938 to 1961, England and Wales	25
XI	Proportional age distribution per 1,000 at all ages and average age at remarriage of widowed persons, 1931 and 1938 to 1961, England and Wales	26
XII	Remarriage rates of widowed and divorced persons by sex and age, 1951 to 1961, England and Wales	27
XIII	Proportional age distribution per 1,000 at all ages and average age at remarriage of divorced persons, 1941 to 1961, England and Wales	28
XIV	Proportional age distribution per 1,000 at all ages of spinsters who married bachelors of a given age, 1961, England and Wales	30
XV	Proportional age distribution per 1,000 at all ages of bachelors who married spinsters of a given age, 1961, England and Wales	31
XVI	Proportional age distribution per 1,000 at all ages of widowed and divorced women who married widowed and divorced men of a given age, 1961, England and Wales	32
XVII	Proportional age distribution per 1,000 at all ages of widowed and divorced men who married widowed and divorced women of a given age, 1961, England and Wales	33
XVIII	Proportional age distribution of first marriages (actual or projected). Selected years 1930 to 1960, single years 1962 to 1970, and 1980 and 1990, England and Wales	35
XIX	Proportion (actual or projected) of women at stated ages per 1,000 at all ages who (a) marry for the first time and (b) are ever-married. Selected years 1960 to 1990, England and Wales	37
XX	Proportions ever-married, according to the net nuptiality of 1951-55 and 1961, England and Wales	38
XXI	Proportions ever-married among men and women. Selected years 1881 to 1961, England and Wales	39

MARRIAGES—(continued)		<i>Page</i>
XXII	Married women per 1,000 total female population in each age-group and ratio of proportion to that of 1911 taken as 100. Selected years 1911 to 1961, England and Wales	41
XXIII	Quarterly incidence of marriage, 1841 to 1961, England and Wales	42
XXIV	Monthly incidence of marriage, 1947 to 1961, England and Wales	43
DIVORCES		
XXV	Dissolutions and annulments of marriage: new petitions filed and decrees made absolute, 1931 to 1961, England and Wales	45
XXVI	Grounds on which decrees absolute of dissolution were granted by party, 1961, England and Wales	47
XXVII	Divorce rates per 1,000 married population by age at divorce, 1950 to 1961, England and Wales	48
XXVIII	Dissolutions and annulments of marriage made absolute, by duration of marriage and marriage age of wife. Rates per 1,000 married women, 1961, England and Wales	49
XXIX	Divorce rates per 1,000 related marriages by calendar year of marriage and the ages at marriage of both parties in combination, 1961, England and Wales	52
XXX	Divorce rates per 1,000 related marriages, by husband's or wife's age at and marital condition before the marriage and calendar year of marriage, 1961, England and Wales	53
WIDOWHOOD		
XXXI	Percentage of deaths with marital condition not stated, 1959 to 1961, England and Wales	55
XXXII	Widowhood rates, 1957 to 1961, England and Wales	56
BIRTHS		
XXXIII	Live births and birth rates by legitimacy, 1851 to 1961, England and Wales	57
XXXIV	Ratio of legitimate maternities to legitimate live births by age of mother at maternity, 1961, England and Wales	58
XXXV	Illegitimate maternities and pre-maritally conceived legitimate maternities, 1938 to 1961, England and Wales	59
XXXVI	Ratio of legitimate, illegitimate, extra- and pre-maritally conceived maternity rates to those of 1952 taken as 1,000, 1952 to 1961, England and Wales	61
XXXVII	Extra-maritally conceived maternities per 1,000 unmarried women at risk, 1938 and 1952 to 1961, England and Wales	62
XXXVIII	Legitimate maternity rates for women married once only by age and marriage duration, 1952 to 1961, England and Wales	64
XXXIX	Fertility rates by age at marriage for selected durations only. Women married once only, for selected periods 1947-48 to 1960-61, England and Wales	65
XL	Mean family size of selected cohorts since 1929 by age at, and duration of marriage, England and Wales	68
XLI	Ratio of mean family size of marriage cohorts 1949-1960 at short duration to those of 1949 cohort taken as 1,000, all marriage ages under 45, England and Wales	69
XLII	Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales	70
XLIII	Proportion of ultimate family size (actual or projected) for women married once only at selected durations (exact years) and age-at-marriage groups. Completed family size = 1,000. Selected years of marriage, 1929-1960, England and Wales (<i>Using fertility rates for 1960-61</i>)	72
XLIV	Proportion of ultimate family size (actual or projected) for women married once only at selected durations (exact years) and selected age-at-marriage groups. Completed family size = 1,000. Selected years of marriage, 1929 to 1960, England and Wales (<i>Using fertility rates for 1951-55</i>)	73
XLV	Gross and net reproduction rates, 1841 to 1961, England and Wales	74
XLVI	Family size distribution per 1,000 women married once only, by duration of, calendar year of, and age at marriage, England and Wales	78
XLVII	Male births per 1,000 female births, by legitimacy and whether live or still, 1928 to 1961, England and Wales	86
XLVIII	Multiple birth proportions, 1938 to 1961, England and Wales	87
XLIX	Proportion of multiple maternities by age of mother and legitimacy, 1938 to 1961, England and Wales	89
L	Twin maternities per 1,000 total maternities by type, age of mother and legitimacy, 1938 to 1961, England and Wales	90

BIRTHS—(continued)		<i>Page</i>
LI	Quarterly incidence of live births in relation to the average for the calendar year, ratio of quarterly daily average to that of the calendar year taken as 100: 1841 to 1961, England and Wales	97
LII	Quarterly live birth incidence in relation to the average for the calendar year, ratio of quarterly daily average to that of the calendar year taken as 100, 1939, 1951–55, 1959 to 1961, England and Wales	97
LIII	Monthly birth incidence in relation to the average for the calendar year, 1939, 1951–1955, 1956–1960, 1960 and 1961, England and Wales	98
LIV	Monthly incidence of legitimate live births in relation to the trend, 1958 to 1961, England and Wales	98

GENERAL MORTALITY

LV	Crude annual death rates per 1,000 living, and Standardised Mortality Ratios, 1841 to 1961, England and Wales	104
LVI	Abridged life table, 1959–61, England and Wales	105
LVII	Expectation of life at birth and at age one year, 1838 to 1961, England and Wales	106
LVIII	Annual death rates per 1,000 living, by quarters in each year 1931 to 1961, with ratios to each yearly rate taken as 100, England and Wales	107
LIX	Average annual death rates per 1,000 living, by sex and age, 1841 to 1961, England and Wales	108
LX	Deaths, death rates per million living, and Standardised Mortality Ratios (1950–52 = 100), from selected causes, by sex, 1952 to 1961, England and Wales	109
LXI	Death rates per 1,000 living, by sex and age, and Standardised Mortality Ratios (all ages), in standard regions and urban and rural aggregates within regional groups, 1961, England and Wales	112
LXII	Deaths from certain causes: (a) by sex and age, (b) distinguishing deaths in which a post-mortem was performed or there was a record of operation, and (c) the percentage to all deaths, 1961, England and Wales	114
LXIII	Notifications of certain infectious diseases: Notification rates per 100,000 living, by sex and age, 1961, England and Wales	117

Infant mortality and stillbirths

LXIV	Trend of stillbirths per 1,000 total births, 1928 to 1961, and of deaths in the neonatal, post-neonatal and other age periods under 1 year per 1,000 live births, 1906 to 1961, England and Wales	119
LXV	Stillbirths per 1,000 total births, and deaths in the early neonatal, late neonatal, and post-neonatal periods per 1,000 live births, distinguishing illegitimacy, 1936 to 1961, England and Wales	121
LXVI	Principal causes of death under 1 year: (a) Age-group distribution per cent of all deaths assigned to each cause, (b) Cause distribution per 1,000 total deaths in each age-group, 1961, England and Wales	122
LXVII	Principal causes of death under 1 year in the neonatal, post-neonatal and other age periods, by sex, per 1,000 live births, 1961, England and Wales	124
LXVIII	Stillbirths per 1,000 total births, and infant deaths per 1,000 live births in the early neonatal, late neonatal and post-neonatal periods, and from the principal causes of infant mortality; comparison of annual and quarterly rates, 1961, England and Wales	126
LXIX	Infant deaths at various ages per 1,000 live births, and combined stillbirths and infant deaths per 1,000 total births, in standard regions, conurbations, and urban and rural aggregates within regional groups, 1961, England and Wales	127
LXX	Infant deaths per 1,000 live births in regional groups from the principal causes of infant mortality; regional group rates as percentages of corresponding national rates, 1961, England and Wales	129
LXXI	Trend of stillbirths per 1,000 total births, and of deaths in the neonatal, and post-neonatal periods per 1,000 live births, in standard regions, 1956 to 1961, England and Wales	131

Maternal mortality

LXXII	Maternal mortality: Deaths from principal causes, and associated maternal mortality, 1931 to 1961, England and Wales	132
LXXIII	Maternal mortality, distinguishing principal causes, and associated maternal mortality. Death rates per 100,000 total births, 1931 to 1961, England and Wales	134

Maternal mortality—(continued)

LXXIV	Maternal mortality: Deaths attributed to or associated with abortion, 1931 to 1961, England and Wales	136
LXXV	Deaths of women certified as due to pregnancy or childbearing, by age and cause, 1961, England and Wales	137
LXXVI	Deaths of women not classed to pregnancy or childbearing, but certified as associated therewith, 1961, England and Wales	138

Tuberculosis

LXXVII	Tuberculosis of the respiratory system: Death rates per million living, by sex and age, 1931 to 1961, England and Wales	139
LXXVIII	Tuberculosis of the respiratory system: Notification rates per 100,000 living, by sex and age, 1938 to 1961, England and Wales	140
LXXIX	Tuberculosis of the respiratory system: Ratio of deaths to 100 notifications, by sex and age, 1938 to 1961, England and Wales	141
LXXX	Tuberculosis of the respiratory system: Death rates per million living, by sex and age, and notifications per 100 deaths in standard regions, conurbations, and urban and rural aggregates within regional groups, 1961, England and Wales	142
LXXXI	Tuberculosis of the respiratory system: Notification rates per 100,000 living, by sex and age, in standard regions, 1961, England and Wales	144
LXXXII	Tuberculosis of the respiratory system: Ratio of deaths to 100 notifications, by sex and age, in standard regions, 1961, England and Wales	145
LXXXIII	Tuberculosis of the respiratory system: Standardised Mortality Ratios and standardised notification ratios, by sex, in standard regions, conurbations, and urban and rural aggregates, 1961, England and Wales	146
LXXXIV	Non-respiratory tuberculosis: Death rates per million living, by sex and age, 1938 to 1961, England and Wales	147
LXXXV	Non-respiratory tuberculosis: Notification rates per million living, by sex and age, 1938 to 1961, England and Wales	147
LXXXVI	Mass miniature radiography: Number of examinations made by mass radiography units, by sex, age, and category of person examined, 1961, England and Wales	148
LXXXVII	Mass miniature radiography: (a) Numbers of cases of respiratory tuberculosis requiring treatment or close clinic supervision observed by mass radiography units, (b) rates per 1,000 examinations, by sex, age, and category of person examined, 1961, England and Wales	150
LXXXVIII	Mass miniature radiography: (a) Numbers, (b) rates per 1,000 examinations of non-tuberculous conditions diagnosed following examination, by sex and age, 1961, England and Wales	152

Cancer

LXXXIX	Deaths from cancer by sex and age according to histological type and death rates per million living, 1961, England and Wales	154
XC	Cancer (ICD Nos. 140–205)—males: Sex and age specific death rates per million living from cancer at various sites and the percentage of mortality at each site to “all sites”, 1961, England and Wales	155
XCI	Cancer (ICD Nos. 140–205)—females: Sex and age specific death rates per million living from cancer at various sites and the percentage of mortality at each site to “all sites”, 1961, England and Wales	157
XCII	Cancer: Standardised Mortality Ratios by sex for selected sites, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1961, England and Wales	159
XCIII	Cancer: Death rates per million living, by sex and certain ages, and Standardised Mortality Ratios (all ages) by sex, for selected sites, 1952 to 1961, England and Wales	161

Diseases of the circulatory system

XCIV	Diseases of the circulatory system, vascular lesions affecting the central nervous system, and congenital malformations of circulatory system: Death rates per million living, and Standardised Mortality Ratios (1950–52 = 100), by sex, 1951 to 1961, England and Wales	167
XCV	Diseases of the circulatory system, vascular lesions affecting the central nervous system, and congenital malformations of circulatory system: Deaths and death rates per million living, and per 100 deaths from all circulatory diseases, by sex and age, 1961, England and Wales	168

Diseases of the circulatory system—(continued)

XCVI	Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 45–64, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1961, England and Wales	169
XCVII	Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 65 and over, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1961, England and Wales	170
XCVIII	Congenital malformations of the circulatory system (ICD No. 754): Deaths and death rates per million living, by sex and age, 1953 to 1961, England and Wales	171

Bronchitis

XCIX	Bronchitis (ICD Nos. 500–502): Infant mortality rates per thousand live births, death rates per million living at ages over one year, and Standardised Mortality Ratios (1950–52 = 100), 1949 to 1961, England and Wales ..	172
C	Bronchitis: Death rates per million living, by sex, at ages 15–44, 45–64, and 65 and over, and Standardised Mortality Ratios, in standard regions and urban and rural aggregates within regional groups, 1961, England and Wales	173

Accidents and violence

CI	Accidents and violence: Proportion of deaths attributed to violent causes per 100 deaths from all causes, by sex and age, 1901 to 1961, England and Wales	174
CII	Accidents and violence: Death rates per million living, by sex and age, 1901 to 1961, England and Wales	174
CIII	Motor vehicle accidents: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1931 to 1961, England and Wales ..	175
CIV	Motor vehicle accidents: Deaths by sex according to nature of injury and external cause, 1961, England and Wales	176
CV	Deaths of pedestrians, pedal cyclists, motorcyclists, motor vehicle occupants and others in motor vehicle traffic accidents, motor vehicle non-traffic accidents, and other road vehicle accidents, by sex, 1941 to 1961, England and Wales	177
CVI	Suicide: Death rates per million living, by sex and age, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1957–61, England and Wales	178
CVII	Suicide: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1901 to 1961, England and Wales	179
CVIII	Suicide: Proportions per 1,000 deaths according to external agent, by sex and age, 1957–61, England and Wales	180
CIX	Accidents in the home and residential institutions: Deaths and death rates per million living, by sex and age, 1961, England and Wales	181
CX	Accidents in the home and residential institutions: Deaths by month of occurrence, 1952–57, and 1958 to 1961, England and Wales	182
CXI	Accidents in the home and residential institutions: Death by cause and sex at age 65 and over, 1961, England and Wales	184
CXII	Accidents in the home and residential institutions: Deaths by cause, sex, and age, 1961, England and Wales	185
CXIII	Accidental falls: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1901 to 1961, England and Wales ..	186
CXIV	Accidental deaths: Deaths, infant mortality rates per 1,000 live births, and death rates per million living at all ages and ages over one year, by sex and age, 1961, England and Wales	187

STILLBIRTHS

CXV	Stillbirths by cause and percentage to all stillbirths for the December quarters of 1960 and 1961, England and Wales	192
CXVI	Stillbirths in previous legitimate pregnancies (live or still births) of women who bore a dead child in 1961, England and Wales	199
CXVII	Selected causes of stillbirth as a percentage of all causes, by duration of pregnancy, 1961, England and Wales	205

Page

MALIGNANT NEOPLASMS OF THE GENITAL ORGANS ACCORDING TO MARITAL CONDITION

CXVIII	Malignant neoplasms of the genital organs, Standardised Mortality Ratios, 1959, England and Wales	210
CXIX	Deaths from malignant neoplasms and death rates per million living by marital condition and age, 1957-1961, England and Wales	
	(A) Cervix uteri (ICD No. 171)	211
	(B) Corpus uteri (ICD No. 172)	213
	(C) Ovary (ICD No. 175.0)	215
	(D) Testis (ICD No. 178)	217
	(E) Prostate (ICD No. 177)	219

CARDIOVASCULAR DISEASES

CXX	Geographical variation in diseases of the cardiovascular system, average death rates per 1,000 living and deviation from average, by sex at ages 45-64 and 65 and over, 1959-1961, England and Wales	235
CXXI	Deaths from cardiovascular diseases showing salient changes at different periods of life, 1955 to 1961, England and Wales	237
CXXII	Deaths from cardiovascular diseases showing (a) number and percentage of total deaths by sex according to type of institution etc., in which they occurred, (b) post-mortem held and (c) Coroner's enquiries made, 1961, England and Wales	239

SUICIDE, 1901 to 1961

CXXIII	Deaths from suicide, at all ages, by sex, 1901 to 1961, England and Wales	241
CXXIV	Suicide : crude death rates per million living, by sex, 1901 to 1961, England and Wales	244
CXXV	Suicide : death rates per million living by sex and age, 1901 to 1961, England and Wales	246
CXXVI	Percentage distribution of suicides by month of occurrence in ten year periods 1921-1960, England and Wales	250
CXXVII	Suicide and all causes: Standardised Mortality Ratios, males and married women aged 20-64 according to social class for periods 1921-23, 1930-32 and 1950, England and Wales	254
CXXVIII	Suicide death rates per million living by sex and ages 15 years and over, in conurbations, urban and rural aggregates, 1955-59 and 1960-61, England and Wales	254
CXXIX	Suicide death rates per million living for certain years, by sex, in standard regions, England and Wales	255
CXXX	Suicide, crude death rates per million living in metropolitan and county boroughs and ranking order, 1950 and 1960, England and Wales	256
CXXXI	County boroughs with highest suicide rates in 1950 and 1960 with their rankings for various indices among the 157 largest towns in England and Wales	261
CXXXII	Crude suicide rates per million living, according to the method used, 1912-1960, England and Wales	263
CXXXIII	The percentage of effective suicides as measured by the ratio Verdicts/ (Verdicts + cases attempted), 1954-1960, England and Wales	265

MISCELLANEOUS

CXXXIV	Corrected notifications and deaths assigned to a few uncommon infectious diseases, 1961, England and Wales	267
CXXXV	Corrected notifications of diphtheria, 1961, England and Wales	269
CXXXVI	Deaths from encephalitis certified as secondary to infectious disease, by underlying cause, sex and age, 1961, England and Wales	270
CXXXVII	Deaths due to tetanus, by sex and age, showing cause of tetanus, 1961, England and Wales	271
CXXXVIII	Deaths by cause, sex and age, connected with the administration of anaesthetics, 1961, England and Wales	273
CXXXIX	Fatal therapeutic misadventures due to adverse reaction to drug or therapy, 1961, England and Wales	274
CXL	Fatal therapeutic misadventures due to overdose of drug, 1961, England and Wales	279
CXLI	Fatal therapeutic misadventures due to mistake in drug administration, 1961, England and Wales	280
CXLII	Fatal therapeutic misadventures due to accident in technique, 1961, England and Wales	280

MISCELLANEOUS—(continued)

	<i>Page</i>
CXLIII Deaths by cause and sex according to type of institution, etc., in which they occurred, 1961, England and Wales	285
CXLIV Deaths by cause and sex, according to method of certification, 1961, England and Wales	289
CXLV Births by place of confinement, 1961, England and Wales	
CXLVI Live births by age and parity of mother and place of confinement, 1961, England and Wales	291
CXLVII Stillbirths by age and parity of mother and place of confinement, 1961, England and Wales	292
CXLVIII Percentage distribution of births for each place of confinement within each age and parity group, 1961, England and Wales	292
CXLIX Stillbirth rates per 1,000 total births, by age and parity of mother and place of confinement, 1961, England and Wales	293
CL Stillbirth rates per 1,000 total births, by parity of mother and place of confinement, 1961, England and Wales, standard regions and Wales	294

GREAT BRITAIN AND IRELAND

CLI Vital statistics: 1938 and 1946 to 1961, Great Britain and Ireland	300
CLII Percentage increase in the intercensal populations 1841–1961 and 1951–61, and the percentage distribution of the populations, 1841, 1951 and 1961, Great Britain and Ireland	302

PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS

CLIII Parliamentary and local government electors, 1956 to 1961, England and Wales	316
CLIV (a) Parliamentary constituencies by size, distinguishing county and borough constituencies, 1958 and 1961, England	317
(b) Parliamentary constituencies by size, distinguishing county and borough constituencies, 1958 and 1961, Wales	317
CLV Local government elections. Percentage of electorate voting in contested county council elections, 1961, England and Wales and standard regions	319
CLVI Local government elections. Percentage of electorate voting in contested elections in urban areas, 1961, England and Wales	320
CLVII Local government elections. Percentage of electorate voting in contested rural district elections, 1961, England and Wales and standard regions	321
CLVIII Local government elections. Percentage of electorate voting in contested elections, 1953 to 1961, England and Wales	323

DIAGRAMS

MARRIAGES

	<i>Page</i>
1. Marriage rates of women by age, 1911 to 1961, England and Wales ..	24

DIVORCES

2. Dissolutions and annulments of marriage: new petitions filed and decrees made absolute per 1,000 married women aged 20-49, 1931 to 1961, England and Wales	46
3. Rates of dissolution and annulment of marriage by duration of marriage and marriage age of wife, 1961, England and Wales	49

BIRTHS

4. Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales.. .. .	71
5. Proportional family size by duration of marriage; women married for the first time in 1951, all marriage ages under 45, England and Wales ..	84
6. Proportion of women with two or more children by duration of and age at marriage; women married for the first time in 1951, England and Wales	85
7. Legitimate monozygotic twin maternities per 1,000 total legitimate maternities by age of mother, 1938 to 1961, England and Wales.. ..	92
8. Dizygotic twin maternities per 1,000 total maternities by age of mother and legitimacy, 1938 to 1961, England and Wales	94
9. Comparison of legitimate and illegitimate dizygotic twin maternity rates, 1957-61, England and Wales.. .. .	95
10. Monthly incidence of legitimate live births in relation to the trend, 1958 to 1961, England and Wales	99

MALIGNANT NEOPLASMS OF THE GENITAL ORGANS ACCORDING TO MARITAL CONDITION

11. Deaths from malignant neoplasms and death rates per million living by marital condition and age, 1957-61, England and Wales	
(A) Cervix uteri	212
(B) Corpus uteri	214
(C) Ovary	216
(D) Testis	218
(E) Prostate	220

SUICIDE, 1901 TO 1961

12. Annual deaths from suicide, 1901 to 1961, England and Wales	242
13. Five-yearly moving average of suicide death rates, 1901 to 1961, England and Wales	245
14. Suicide death rates per million living by sex and age, England and Wales	
(A) 1901 to 1950	247
(B) 1951 to 1961	249
15. Percentage distribution of suicides by standard months of 30 days, 1921-1960, England and Wales	251
16. Standardised Mortality Ratios for all causes and for suicide by social class, 1921-1923, 1930-1932 and 1950, England and Wales	253

EXPLANATORY NOTES

1. Populations

The estimates of population appearing in this volume and described as "home" or "total" populations have the following content:

Home population—the population, of all types, actually in England and Wales, distributed by area according to residence.

Total population—the home population *plus* members of H.M. Forces belonging to England and Wales and serving overseas but *minus* the Forces of other countries temporarily in England and Wales.

2. Stillbirths

Classification of stillbirths by cause is according to the Supplementary List, set out on pages 336–348 of the *International Statistical Classification of Diseases, Injuries and Causes of Death, 1955** (Seventh Revision), with further sub-division of certain rubrics, and as modified by the following changes of assignment:

Cause of stillbirth	Rubrics to which cause is assigned	
	(i) in International Classification	(ii) in tables listed below
Patent ductus arteriosus	39.5	38.41
Patent foramen ovale		38.43
Congenital heart condition NOS		38.45
Foetal heart condition NOS		38.45

3. Numbering of tables

Of the tables referred to in this review, those numbered in Arabic numerals will be found in "Part I, Tables, Medical" and those lettered will be found in "Part II, Tables, Population" for the year in question, while those numbered in Roman numerals appear in this volume.

4. Standardised mortality comparison

The Comparative Mortality Index introduced in 1942 has since 1958 been replaced by a Standardised Mortality Ratio which shows the number of deaths registered in the year of experience as a percentage of those which would have been expected in that year had the sex/age mortality of a standard period (1950–1952) operated on the sex/age population of the year of experience.

These Standardised Mortality Ratios are shown in Tables LV, LX, XCHI, XCIV, XCIX, CIII, CVII, and CXIII of the present volume.

5. Indication of reliability

Rates given as 0 indicate that the actual rate is less than one half of a unit. A dash (—) in any column indicates that there were no events. Where a cell has been left blank no denominator is available.

Rates based upon less than 20 events are distinguished by italic type as a warning to the user that the smallness of the experiences may affect their reliability as a measure of the underlying mortality.

Numbers

If d represents the deaths in an area and p the population in that area then, if d/p is small, the standard error (s.e.) of d is approximately \sqrt{d} assuming that the deaths are independent of one another. Clearly, the larger the number of deaths the smaller will be the proportionate variability. A deviation either way of twice the s.e. may be expected about once in 20 times. Using this criterion one might expect towns each averaging 20 deaths per year to yield in the same year numbers ranging between 11 and 29 without such differences having any statistical significance. Alternatively it could be said that if 20 deaths were recorded for a town, this number would have a 95 per cent confidence interval of approximately ± 9 , there being a 95 per cent chance that the underlying mortality is represented by a number of deaths within this interval.

If d is thought to be an extreme variation it would be more reliable to use as the standard error not \sqrt{d} but $\sqrt{d'}$ where d' is the number of deaths expected if some standard rate (e.g. the national rate) were applied.

* Manual obtainable from Her Majesty's Stationery Office, price 35s. 0d. net.

Rates

The appropriate standard error of a death rate when *d* represents the number of deaths and *p* the population is

$$\frac{\sqrt{d}}{p} \text{ or } \frac{m}{\sqrt{d}}$$

where *m* is the death rate. The difference between two local death rates *m*₁ and *m*₂ can only be regarded as significant if it amounts to more than twice the standard error of the difference, viz.

$$2 \sqrt{\left(\frac{m_1^2}{d_1} + \frac{m_2^2}{d_2}\right)}.$$

Comparison of adjusted rates

Before comparisons are made, other known sources of variation (such as differences in the sex and age composition of the population) must be removed. If *C* is the local death Area Comparability Factor, then *mC* is to be compared with *m'*, the national death rate. The s.e. of *mC* is

$$C \sqrt{\left(\frac{m}{p}\right)^*}$$

and

$$mC \pm 2C \sqrt{\left(\frac{m}{p}\right)^*}$$

is to be compared with *m'*. As already indicated, *m'* can be used instead of *m* in the calculation of the s.e.; *m'* has the advantage of itself having a small sampling error.

6. Definition of areas

London A.C. = administrative county of London which consists of the City of London (including the Inner and Middle Temples) and the metropolitan boroughs.

C.B. = county borough; **M.B.** = municipal borough; **Met.B.** = metropolitan borough; **U.D.** = urban district; **R.D.** = rural district.

7. Standard regions

The constitution of the standard regions of England and Wales used in this volume is as follows:

REGION I <i>Northern</i> Cumberland Durham Northumberland Westmorland Yorkshire, North Riding	REGION IV <i>Eastern</i> Bedfordshire Cambridgeshire Ely, Isle of Essex, Part of ² Hertfordshire, Part of ³ Huntingdonshire Norfolk Suffolk, East Suffolk, West	REGION VI <i>Southern</i> Berkshire Buckinghamshire Dorset, Part of ⁶ Hampshire Oxfordshire Wight, Isle of	<i>Wales II (remainder)</i> Anglesey Caernarvonshire Cardiganshire Denbighshire Flintshire Merionethshire Montgomeryshire Pembrokeshire Radnorshire
REGION II <i>East and West Ridings</i> Yorkshire, East Riding Yorkshire, West Riding	REGION V <i>London and South Eastern</i> Essex, Part of ⁴ Hertfordshire, Part of ⁶ Kent London Admin. County Middlesex Surrey Sussex, East Sussex, West	REGION VII <i>South Western</i> Cornwall Devon Dorset, Part of ⁷ Gloucestershire Somerset Wiltshire	REGION IX <i>Midland</i> Herefordshire Shropshire Staffordshire Warwickshire Worcestershire
REGION III <i>North Midland</i> Derbyshire, Part of ¹ Leicestershire Lincolnshire— Parts of Holland Parts of Kesteven Parts of Lindsey Northamptonshire Nottinghamshire Peterborough, Soke of Rutland		REGION VIII <i>Wales I (South East)</i> Breconshire Carmarthenshire Glamorgan Monmouthshire	REGION X <i>North Western</i> Cheshire Derbyshire, Part of ⁸ Lancashire

1. All except Buxton M.B., Glossop M.B., New Mills U.D., Whaley Bridge U.D. and Chapel en le Frith R.D.
2. All except East Ham C.B., West Ham C.B., Chingford M.B., Wanstead and Woodford M.B., Leyton M.B., Walthamstow M.B., Ilford M.B., Barking M.B., Dagenham M.B., Waltham Holy Cross U.D. and Chigwell U.D.
3. All except Barnet U.D., Bushey U.D., Cheshunt U.D., East Barnet U.D. and Elstree R.D.
4. All areas stated in 2 above.
5. All areas stated in 3 above.
6. Poole M.B. only.
7. All areas except Poole M.B.
8. All areas stated in 1 above.

* It is regretted that these formulae have been erroneously given as $\sqrt{\left(\frac{mC}{p}\right)}$ and $mC \pm 2 \sqrt{\left(\frac{mC}{p}\right)}$ in previous editions of this Review.

8. Conurbations

The conurbation areas each consist of an aggregation of entire local authority areas and are constituted as follows:

Tyneside			
Durham		Northumberland	
Gateshead C.B.	Felling U.D.	Newcastle upon Tyne C.B.	Longbottom U.D.
South Shields C.B.	Hebburn U.D.	Tynemouth C.B.	Newburn U.D.
	Jarrow M.B.		Wallsend M.B.
	Whickham U.D.	Gosforth U.D.	Whitley Bay M.B.
West Yorkshire			
Yorkshire, West Riding			
Bradford C.B.	Aireborough U.D.	Heckmondwike U.D.	Ossett M.B.
Dewsbury C.B.	Baildon U.D.	Holmfirth U.D.	Pudsey M.B.
Halifax C.B.	Batley M.B.	Horbury U.D.	Queensbury and Shelf U.D.
Huddersfield C.B.	Bingley U.D.	Horsforth U.D.	Ripponden U.D.
Leeds C.B.	Brighouse M.B.	Keighley M.B.	Rothwell U.D.
Wakefield C.B.	Colne Valley U.D.	Kirkburton U.D.	Shipley U.D.
	Denby Dale U.D.	Meltham U.D.	Sowerby Bridge U.D.
	Denholme U.D.	Mirfield U.D.	Spenborough M.B.
	Elland U.D.	Morley M.B.	Stanley U.D.
South East Lancashire			
Cheshire		Lancashire	
Stockport C.B.	Bolton C.B.	Horwich U.D.	Urmston U.D.
	Bury C.B.	Irlam U.D.	Wardle U.D.
Alderley Edge U.D.	Manchester C.B.	Kearsley U.D.	Westhoughton U.D.
Altrincham M.B.	Oldham C.B.	Lees U.D.	Whitefield U.D.
Bowdon U.D.	Rochdale C.B.	Littleborough U.D.	Whitworth U.D.
Bredbury and Romiley U.D.	Salford C.B.	Little Lever U.D.	Worsley U.D.
Cheadle and Gatley U.D.	Ashton-under-Lyne M.B.	Middleton M.B.	
Dukinfield M.B.	Audenshaw U.D.	Milnrow U.D.	
Hale U.D.	Chadderton U.D.	Mossley M.B.	
Hazel Grove and Bramhall U.D.	Crompton U.D.	Prestwich M.B.	
Hyde M.B.	Denton U.D.	Radcliffe M.B.	
Marple U.D.	Droylsden U.D.	Royton U.D.	
Sale M.B.	Eccles M.B.	Stretford M.B.	
Stalybridge M.B.	Failsworth U.D.	Swinton and Pendlebury M.B.	
Wilmslow U.D.	Farnworth M.B.	Tottington U.D.	
Disley R.D.	Heywood M.B.		
Merseyside			
Cheshire		Lancashire	
Birkenhead C.B.	Ellesmere Port M.B.	Bootle C.B.	Huyton-with-Roby U.D.
Wallasey C.B.	Hoylake U.D.	Liverpool C.B.	Litherland U.D.
Bebington M.B.	Neston U.D.	Crosby M.B.	
	Wirral U.D.		
West Midlands			
Staffordshire		Warwickshire	
Smethwick C.B.	Darlaston U.D.	Birmingham C.B.	Dudley C.B.
Walsall C.B.	Rowley Regis M.B.		
West Bromwich C.B.	Sedgley U.D.	Solihull M.B.	Halesowen M.B.
Wolverhampton C.B.	Tettenhall U.D.	Sutton Coldfield M.B.	Oldbury M.B.
	Tipton M.B.		Stourbridge M.B.
Aldridge U.D.	Wednesbury M.B.		
Amblecote U.D.	Wednesfield U.D.		
Bilston M.B.	Willenhall U.D.		
Brierley Hill U.D.			
Coseley U.D.			

Greater London

<i>London</i>		<i>Kent</i>	<i>Essex</i>
(whole county)		Beckenham M.B.	East Ham C.B.
<i>Middlesex</i>		Bexley M.B.	West Ham C.B.
(whole county)		Bromley M.B.	
		Chislehurst and Sidcup U.D.	Barking M.B.
<i>Surrey</i>		Crayford U.D.	Chigwell U.D.
Croydon C.B.	Kingston-upon-Thames M.B.	Erith M.B.	Chingford M.B.
Banstead U.D.	Malden and Coombe M.B.	Orpington U.D.	Dagenham M.B.
Barnes M.B.	Merton and Morden U.D.	Penge U.D.	Ilford M.B.
Beddington and Wallington M.B.	Mitcham M.B.		Leyton M.B.
Carshalton U.D.		<i>Hertfordshire</i>	Waltham Holy Cross U.D.
		Barnet U.D.	Walthamstow M.B.
Coulson and Purley U.D.	Richmond M.B.	Bushey U.D.	Wanstead and Woodford M.B.
Epsom and Ewell M.B.	Surbiton M.B.	Cheshunt U.D.	
Esher U.D.	Sutton and Cheam M.B.	East Barnet U.D.	
	Wimbledon M.B.	Elstree R.D.	

9. Urban and rural aggregates

Urban and rural aggregates relate to groups of local authority areas by type (all those within conurbations, urban areas, rural districts) and, in the case of urban areas, by size of enumerated population at the 1951 Census. "Urban areas" include boroughs and urban districts as defined under the Local Government Acts, and rural districts are also as defined by those Acts.

10. Assignment of vital statistics by area

In all tables births and stillbirths are classified according to the area of usual residence of the parents (or mother) and deaths to the area of usual residence of the deceased. Accommodation provided under Parts III and IV of the National Assistance Act, 1948, is regarded as the place of residence of persons dying there. Before 1st January 1958 chronic sick and psychiatric hospitals were similarly treated for this purpose but from that date the method of classification was modified, the main change being that a death in such a hospital is now assigned to the area of occurrence only if the deceased had been there six months or more. If the deceased had been there less than six months the death is transferred to the area of previous usual residence.

11. General

See also the Explanatory Notes to the Tables volumes, Parts I and II.

CORRECTIONS

Statistical Review, 1960: Part III, Commentary

Page 43 Table XXVI; 1960 line *should read* 43,281; 61,799; 105,080; 13·3; 58·8.

Page 82 Table XLII; column 7, ulcer of the stomach (540),
for 1 read 15.

Page 153 Table LXXX; column 15, line 4,
for 51 read 108.

Page 269 Table 1(f); marriage age 35–39 *should read*

Calendar year of marriage	Marriage duration (exact years)
	16
1934	·66
1935	·54

INTRODUCTION

This Commentary follows the pattern of recent years. Its analyses of the statistics of life and death which have already been presented in Parts I and II of the Review for 1961 are designed to assist, in their administration or research, demographers, statisticians, medical research organisations, public health authorities, and all other individuals and organisations who have to take account of the vital statistics of England and Wales.

A feature of this volume is comment on the first full year's information on causes of stillbirth which doctors and midwives have been providing since 1st October 1960, when Section 2 of the Population (Statistics) Act, 1960, came into operation. This new information about stillbirths, which has been analysed by cause, sex and number, and in relation to such factors as length of gestation, birth weight and place of confinement, should prove of particular interest to all those engaged in the struggle to reduce the incidence of stillbirth in this country.

Special studies have long been a feature of these Commentaries. One of particular interest in this volume is a survey of suicides over the past 60 years.

General Register Office,
Somerset House,
London, W.C.2.

June 1963.

POPULATION

It is easy enough to define the population of a country as the total number of its inhabitants; but there is no single definition of an inhabitant universally acceptable for all statistical purposes. Traditionally either a *de facto* (actual) or a *de jure* (by entitlement) figure may be given, or both. But apart from the difficulty in making a choice between them, and in spite of special circumstances which may complicate even a true *de facto* count (e.g. the presence of nomadic groups, pockets of officially unrecognised displaced persons, etc. in a country), the United Nations Population Commission has found so confused and complicated a picture of actual theory and practice that—in the interest of comparability between the statistics of different nations—it recommended the production from each national census since the 1950 round of total figures on a uniform modified *de facto* basis, whatever other figures were also produced.

This “international conventional total” is defined (in the 1961 U.N. Demographic Yearbook) as “the total number of persons present in the country at the time of the census, *excluding* foreign military, naval and diplomatic personnel and their families located in the country but *including* military, naval and diplomatic personnel of the country and their families located abroad and merchant seamen resident in the country but at sea at the time.”

For England and Wales, three separate estimates of the population of the country as a whole at each mid-year are made by the Registrar General and published. The *home* (or *de facto*) estimate—as defined in Explanatory Note 1 on page xiv—comprises all persons actually present in the country, civilian and military, and of whatever nationality. It is an estimate constructed from the latest Census prior to the mid-year concerned, with allowance for births, deaths, migration into and out of the country and variation in the disposition of the Armed Forces since the Census was taken. No adjustment is made, however, for the purely temporary seasonal net increase in visitors to this country in the summer months. For internal purposes the home population is the most important of the three estimates given. It serves as the control figure for the local population estimates on which Exchequer grants to local authorities are based and as a basis for the calculation of birth and death rates and other vital statistics. The term *civilian* population is self-explanatory—it is the home figure excluding its Armed Forces content. Explanatory Note 1 also defines our *total* population figure as the home population *plus* members of H.M. Forces serving overseas who are drawn from England and Wales, but *minus* the Forces of other countries temporarily stationed here.

The *total* population of England and Wales is so defined as to suit national requirements; and its development, though not its publication in its present form, long antedates the United Nations discussions and recommendations. In fact, however, it sufficiently approximates to the recommended “international conventional total” to be identifiable with it for the purposes of international comparability.

The inclusion of merchant seamen at sea is recommended by the U.N. Population Commission, but is not mentioned in Explanatory Note 1. They are excluded from all three of the published estimates for England and Wales.

Similarly, the categories referred to above as recommended for exclusion, but which are not mentioned in Explanatory Note 1, are included by us. On the basis of past experience, however, it is possible to assume that these contrasting groups are in rough balance.

It is estimated that at mid-1961 the *home* population of England and Wales was 46,166,000, the *civilian* population 45,852,000 and the *total* population 46,269,000.

Population growth

Table I. Estimated population mid-1951 to mid-1961, England and Wales
(Figures in thousands)

	Total			Home			Civilian		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1951	44,007	21,233	22,774	43,815	21,044	22,771	43,284	20,530	22,754
1952	44,166	21,320	22,846	43,955	21,110	22,845	43,402	20,576	22,826
1953	44,301	21,397	22,904	44,109	21,206	22,903	43,541	20,658	22,883
1954	44,480	21,492	22,988	44,274	21,288	22,986	43,742	20,774	22,968
1955	44,623	21,569	23,054	44,441	21,389	23,052	43,916	20,879	23,037
1956	44,821	21,669	23,152	44,667	21,517	23,150	44,151	21,013	23,138
1957	45,043	21,782	23,261	44,907	21,648	23,259	44,425	21,177	23,248
1958	45,244	21,877	23,367	45,109	21,744	23,365	44,701	21,346	23,355
1959	45,504	22,002	23,502	45,386	21,885	23,501	45,007	21,517	23,490
1960	45,862	22,176	23,686	45,755	22,070	23,685	45,406	21,733	23,673
1961	46,269	22,448	23,821	46,166	22,346	23,820	45,852	22,044	23,808

From Table I above it will be seen that at no time during the period covered would the use of the total population involve the addition of as much as a half of one per cent to the home population and that recently the difference has been narrowing until, by mid-1960 and since, the addition required has been less than a quarter of one per cent of the home population.

In the decade from mid-1951 the home population of England and Wales increased by 2,351,000 (or nearly 5·4 per cent). A comparison of even the average annual gain of 235,000 with its recent inter-censal equivalents provides the first clue to the significance of this decade in the pattern of population growth in this country:

1861-1881	295,000	} 1861-1911	Average	320,000
1881-1891	303,000			
1891-1901	353,000			
1901-1911	354,000			
1911-1921	182,000	} 1911-1961	Average	200,000
1921-1931	207,000			
1931-1951	190,000			
1951-1961	231,000			

The second pointer to what has happened from half way through the decade from mid-1951 is to be found in the individual annual increases, ranging from 140,000 in 1951-52 to 411,000 in 1960-61, coupled with the knowledge at the

time of writing that the 1961-62 figure was over 500,000, with signs that the level, though falling since the coming into operation of the Commonwealth Immigrants Act on 1st July 1962, will continue to be very substantially higher than anything that could have been conjectured two or three years ago. The annual increments are set out below, using both *home* and *total* population figures (*in thousands*):

	1951- 52	1952- 53	1953- 54	1954- 55	1955- 56	1956- 57	1957- 58	1958- 59	1959- 60	1960- 61
Home	140	154	165	167	226	240	202	277	369	411
Total	159	135	179	143	198	222	201	260	358	407

Population growth is simply the net effect of combining the natural change resulting from births and deaths with the balance of migration into and out of the population. The remaining clues as to the correct interpretation of these few and very recent figures, departing from the established trend in our population change for almost half a century and suggesting at least a short-term run of increases in excess of those of late Victorian and Edwardian days, are to be found in the details adding up to natural change and the new role of the balance of migration. Traditionally we have for over a century been cushioned against the full impact of our natural increase; recently our population increase has not only included the whole natural increase figure, but has been almost double it.

Births

The most important element in the annual population increment has been and still is the number of live births occurring during the year, and the change in the pace of population growth reflected a change in the flow of births. The significance of 1911 in establishing a change in the pattern of population growth emerges from the list of yearly averages, which shows (*in thousands*):

1841-50	549	1901-10	930
1851-60	647	1911-20	810
1861-70	750	1921-30	713
1871-80	859	1931-40	606
1881-90	889	1941-50	725
1891-1900	916	1951-60	704

The decline in births began soon after the end of the nineteenth century and rapidly gathered momentum. It was not arrested until the nineteen thirties. In 1933 there were as few as 580,000 live births. A slow rise brought the annual figure up to 621,000 in 1938. After the 1939-45 War there was (as there had been after the 1914-18 War) a sharp upward fluctuation in births, mainly due to "postponed births".

The exceptional and transitory nature of the births "bulge" of 1946 and 1947 is generally accepted as a normal post-war feature. Then there were 821 and 881 thousand live births respectively, sandwiched between three-year

periods when births had averaged 705 and 734 thousand a year, declining to a remarkably steady five-year period when births seemed to have settled down to some 675 thousand a year. Since the middle 'fifties, however, the flow of births has continued to increase. Beginning with 1956, occurrences each calendar year have been (*in thousands*):—700; 723; 741; 749; 785 and (for 1961) 811. It is already known that the 1962 figure for live birth registrations was some 841 thousand, with a slightly higher figure for the fourth quarter of 1962 than for that of 1947.

Table II below sets out the births on a mid-year to mid-year basis for the decade 1951–61. Figures below 700,000 up to mid-1956 are followed by higher figures up to 799,000 for 1960–61 and that for 1961–62 is estimated to be 822,000.

Table II. Natural increase of the population mid-1951 to mid-1961, England and Wales

Year ended 30th June	Births			Deaths			Natural increase		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952	669,195	343,708	325,487	484,136	250,310	233,826	185,059	93,398	91,661
1953	679,757	349,569	330,188	521,161	269,141	252,020	158,596	80,428	78,168
1954	680,794	349,788	331,006	487,860	252,565	235,295	192,934	97,223	95,711
1955	665,190	342,175	323,015	524,446	269,795	254,651	140,744	72,380	68,364
1956	687,214	354,082	333,132	516,340	266,001	250,339	170,874	88,081	82,793
1957	709,658	364,569	345,089	483,659	248,948	234,711	225,999	115,621	110,378
1958	732,751	377,142	355,609	549,955	284,054	265,901	182,796	93,088	89,708
1959	749,059	385,391	363,668	536,131	274,680	261,451	212,928	110,711	102,217
1960	759,184	390,907	368,277	503,974	257,668	246,306	255,210	133,239	121,971
1961	798,664	411,951	386,713	555,130	283,408	271,722	243,534	128,543	114,991

Deaths

Deaths fluctuate from year to year independently of the movement in births, reflecting the irregular incidence of epidemics of influenza and similar events. Though deaths have averaged 516,000 over the whole period covered by Table II, during the last five years of it the average has been 526,000. There were 555,000 deaths in 1960–61 and this is, at the moment, the general level reached on a slowly rising trend (556,000 in 1961–62, while 552,000 deaths in the calendar year 1961 have been followed by a provisional figure of registrations of 557,000 for the year 1962). The rise in the number of annual deaths is mainly due to the ageing of the population. While death rates have continued to fall at most ages the average age of the population has been rising. If we standardise for changes in the sex and age structure of the population we see (Table 3 of Part I) that the general level of mortality in 1961 was 8 per cent below that of 1950–52. However, in assessing the overall growth of population it is the number of deaths (as an offset to births) which is important and this number is likely to continue to rise slowly.

Natural increase

The final columns of Table II set out the excess of births over deaths in England and Wales for the decade up to mid-1961. This natural increase will be more than the actual change in population when emigration exceeds the inward movement of persons into our population from elsewhere, identical with it where there is a balance of migration, but only a part of the actual

population increase where immigration exceeds emigration. Before we look at the recent changeover from the first of these three situations to the third, it is important to note the concomitant growth in the size of the annual natural increase recorded.

The following figures contrast average with recent actual annual increases by natural change and, unless otherwise indicated, they refer to intercensal periods:

1871-1901	..	..	355,000		
1901-1911	..	..	404,000		
1911-1921	..	..	244,000		
1921-1931	..	..	224,000		
1931-1951	..	..	152,000	1931-June, 1939	.. 120,000
1951-1961	..	..	196,000	{	mid-1951-56.. .. 170,000
					mid-1956-61.. .. 224,000

Table II records a natural increase of 244,000 for mid-1960 to mid-1961 and the corresponding figure for mid-1961 to mid-1962 is 266,000.

It will be seen from the section on "Future prospects" on page 10 that an increased figure for natural change in the size of the population of England and Wales can be expected. Unless, therefore, some dramatic reversal of trends in the other aspects of actual population change occurs, we can confidently assume that the era of population increases of under 200,000 a year will be seen to have terminated in the mid-'fifties.

Migration

The other factors in population change are conveniently summarised into a simple net figure of migration; but what is here being measured is the balance between two opposing movements of a complex character. Table III below gives not only the final balance but also two separate constituents. It is necessary to explain the meaning of "migration" in this context. For the sake of greater comparability, international conventional use distinguishes between the long term or "permanent" migrant (a person whose movement to or from a country is expected to persist for at least one year) and the "short term migrant" or temporary visitor. For the estimation of population growth it is necessary to measure all long-term and some short-term migration. A *de facto* Census count will include visitors to a country and exclude residents who are away from it at the time. The following Census will reflect not only the natural change and long-term migration to and from the country in the intervening period; but it will also cover any change in the difference between the number of temporary visitors to this country and the number of residents of England and Wales who are temporarily abroad. Intervening estimates attempt a similar assessment of such changes. To estimate the relatively small change in the "visitor" pool from the enormous passenger movement across the boundaries of England and Wales is a matter of some difficulty. Although the provisional results of the 1961 Census suggest that this was successfully surmounted over the intercensal period as a whole, the same accuracy may not obtain for each of the ten mid-year estimates of migration individually.

Table III. Migration, mid-1951 to mid-1961, to and from England and Wales
(Figures in thousands)

Year ended 30th June	Net overseas migration			Net migration within United Kingdom			Total net migration		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1952	- 45*	- 17	- 28	+ 19	+ 11	+ 8	- 26	- 6	- 20
1953	- 42	- 15	- 27	+ 18	+ 11	+ 7	- 24	- 4	- 20
1954	- 30	- 11	- 19	+ 13	+ 8	+ 5	- 17	- 3	- 14
1955	- 15	- 6	- 9	+ 20	+ 12	+ 8	+ 5	+ 6	- 1
1956	—	- 2	+ 2	+ 25	+ 13	+ 12	+ 25	+ 11	+ 14
1957	- 20	- 13	- 7	+ 20	+ 12	+ 8	—	- 1	+ 1
1958	- 5	- 11	+ 6	+ 19	+ 11	+ 8	+ 14	—	+ 14
1959	+ 30	+ 4	+ 26	+ 18	+ 11	+ 7	+ 48	+ 15	+ 33
1960	+ 84	+ 30	+ 54	+ 24	+ 14	+ 10	+108	+ 44	+ 64
1961	+129	+124	+ 5	+ 29	+ 17	+ 12	+158	+141	+ 17

* Including Allied Forces discharged between mid-1951 and mid-1952.

Table III distinguishes between net migration between England and Wales and the rest of the United Kingdom and net movement between this country and countries outside the United Kingdom. The first is an acknowledgment that in many respects the United Kingdom is a single entity and that this element in the migration balance is a movement much more akin to that between one region of the country and another than, say, emigration from Italy to Wales or from London to Brazil. This net gain to England and Wales from Scotland and Northern Ireland (and allowing for the Isle of Man and the Channel Isles) amounted over the decade to mid-1961 to some 205,000 persons. Since mid-1961 it has persisted at about the 1960-61 level.

One established element in the migration balance is the net annual increase from the Irish Republic. The growth of industrial development in the Republic might have been expected to curtail the availability of Irish immigrant workers; but in fact the inward flow of workers has increased in recent years. There is, however, much movement to and fro and some difficulty in assessing the resultant net annual addition to the population of this country. Over the decade, however, it exceeded a quarter of a million persons. Latterly the annual net intake had increased until, in 1958-59 and 1959-60, it was 35,000 a year, dropping slightly to some 32,000 in 1960-61 and continuing at around the level of 30,000 a year since. These figures take no account of the substantial number of purely seasonal workers who come and go each year in addition. It is clear that by 1961 the net annual gain to our population from Scotland and Ireland was settling down at a new level of some 60,000 a year.

The remaining item in our migration balance is the difference between two complex groupings, and while the 1961 Census preliminary figures with any modifications known to date confirm that our estimating methods had yielded the right answer as to the *difference*, final Census information must be awaited before any useful comment can be passed on the gross totals from which it is derived or on complementary sub-totals on either side of the balance sheet. The gross total on one side includes English and Welsh emigrants to countries

beyond the British Isles, any previous immigrants here from such countries who return home or move on to another such country and any change in the non-seasonal level of residents here temporarily out of the country. The contrasting gross total includes Commonwealth and alien immigrants here from beyond the British Isles, our own former emigrants returning home to England and Wales and any change in the non-seasonal level of overseas visitors here (including, for example, U.S. Forces stationed here and their dependants).

Traditionally the first grouping has usually exceeded the other by more than net immigration here from the Irish Republic and net movement into England and Wales from the rest of the United Kingdom. Recent figures had indicated that for the present the trend had been reversed: immigration from overseas has been in excess of emigration. It was only in 1960, however, that the potential scale of the changeover, from population increases less than the "natural increase" to population increases exceeding the "natural increase" (in fact, more than double four of the ten natural increases in Table II), began to be plain. In the single year 1959-60 the net balance of migration exceeded those of the five years since the trend made its first tentative appearance. In 1960-61 this figure of 108,000 rose to 158,000 and in 1961-62 it reached 225,000. The aliens element in both the inward and outward movements of which these figures are the difference showed relatively trivial variations. The main factor was the sharp rise in the number of overseas Commonwealth citizens coming to England and Wales.

The year 1961 saw the promotion of legislation giving powers to regulate this accelerating flow in the interests of the economy and uncertainty among potential immigrants as to what would in fact result from these powers of control undoubtedly led to much of the increase in the latter half of 1961 and until mid-1962 when the Commonwealth Immigrants Act came into operation. Though Scotland and Northern Ireland have continued over the decade from mid-1951 and since to have population increases less than their natural increase, the proposed legislation related to the United Kingdom as a whole and much use was made in argument of the single figure for the U.K. Net Balance of Migration with the rest of the world prepared for each calendar year since 1953 for the Oversea Migration Board from the population estimates of the three Registrars General. This necessarily understates the impact of immigration on the population growth of England and Wales, since not only is it unconcerned with our net gain from the two other parts of the United Kingdom but it also offsets their net outward balance against our net inward balance with countries outside the U.K. Even so, some idea of the importance of immigration in recent years is conveyed by the fact that the population change recorded by the Censuses of 1951 and 1961 for the whole United Kingdom is almost precisely equal to the excess of births over deaths, i.e. the entire effect of U.K. emigration 1951-61 on its population growth was negated by immigration.

Changes in population structure

The trend of changes in the sex, marital condition and age structure of the population was discussed at length in the 1956 Commentary (pages 6-8). It would clearly be worth while waiting for the detailed results of the 1961 Census before examining the matter in detail again. Although the difficulty in determining the *numbers* to be used on either side of the migration balance sheet has been surmounted, the sex and age structure of the net outward or

inward balance has to rely on some evidence for all aliens and complete evidence only for Commonwealth passengers travelling by the Long Sea Routes direct to United Kingdom ports, a continually declining proportion of all migrants. Since 1961 the prospects of estimating correctly the changes in the sex distribution, age structure and marital condition of our population brought about by migration have been enhanced by the introduction of sampling for migrants travelling by air and more recently for movement by sea between the United Kingdom and the Irish Republic. The provisional results of the count of enumerators' summaries at the 1961 Census suggested that the proportion of females to males at all ages had fallen to 1,066:1,000 by then, indicating that earlier assumptions about the sex proportions of migrants were not borne out. This will modify the reliability of the best estimates we are able to make until fuller information is available. With that proviso, the situation may be summarised as follows.

Sex ratios

About 106 boys are born for every 100 girls; but the death rates for males are higher than those for females at all ages, so that the number of males per thousand females at mid-1961 falls from 1,056 at ages 0-4 to virtual parity for persons in their thirties (though here migration as well as mortality has helped to produce the balance), down to 807 at ages 60-64, while there are three women for every two men in their seventies and twice as many women as men of eighty and over. In 1911 the excess of males at birth was countered by excess male mortality from the 5-9 age-group; now this is postponed until the late thirties. At older ages the death rates for males have fallen much less than those for females and consequently the excess of females at these ages has been increasing. At the 1911 Census there were 757 men for every 1,000 women at ages 65 and over; recently the figure has been reduced year by year and by mid-1961 (subject to final Census figures) had dropped to 623.

Age structure

We have already emphasised the remarkable reduction in the number of births which distinguishes the last half-century from the Victorian and Edwardian eras. One result has been a change in the proportion of young to old in the population. At the 1911 Census children under 15 constituted 30·6 per cent of the entire population, while only 5·2 per cent were over 65. The population aged 15-64 amounted therefore to 64·2 per cent of the whole. At mid-1961 the under-fifteens had fallen to 22·9 but those who had passed their 65th birthday made up 11·9 per cent, the group 15-64 being 65·2 per cent of the whole.

An impressive illustration of the effects of fluctuations in the number of births has been provided by the passage of the post-war births "bulge" (which reached its peak with the 881,000 live births in 1947) through the primary and then the secondary education system and its more recent entry into the labour market. The high birth rate in the later years of the nineteenth and earliest of the twentieth centuries represents another "bulge" (spread over a longer period and therefore over a wider age span) which has passed up into older age-groups and has increased the proportion of elderly persons in the population, in spite of having borne the brunt of the loss of life in the 1914-18 War. The resultant effect on the dependency of one sector of the population on another

is sometimes illustrated by mere comparison of the "working" and "retired" age-groups (15-64 and 65 and over) or the "National Insurance population" (men 15-64; women 15-59) and those beyond these ages. The ratio, present and forecast, of the total number of children and old people together (0-15 and 65 and over) to the population as a whole since the 1931 Census has certainly increased. But comparison with the 1911 Census situation shows that this increase—especially that of the elderly component—is a "growing up" process after the population had been rendered unduly youthful by the very large number of births in the later Victorian and immediately subsequent years. The increase therefore represents a stage in the restoration of a more normal age structure.

In 1911 children and old people together amounted to nearly 36 per cent of the entire population (30·6 per cent under 15 years of age and 5·2 per cent aged 65 and over). In 1931 they were 31 per cent (23·8 per cent children and 7·4 per cent old people). By mid-1961 the proportion had risen to nearly 35 per cent (22·9 per cent children; 11·9 per cent old people). It is thought the proportion may reach its maximum before 1980—with about 25 per cent children and perhaps some 14 per cent old people and that decline in the total proportion and in the ratio of children to old people may be very slight over the following twenty years or so. Measured in these terms, the economic pressure of dependency has not varied very much and is not substantially greater now than in 1911. But, as part of the "growing up" referred to above, the elderly component has increased to more normal proportions.

Marital condition

Table IV. Proportion married per 1,000 in each age-group, 1931, 1951 and 1961, England and Wales

Age	Males			Females		
	1931 (census)	1951 (census)	1961 (estimate)	1931 (census)	1951 (census)	1961 (estimate)
15-24	70	125	153	140	272	315
25-34	640	720	774	658	798	873
35-44	855	862	872	752	820	877
45-54	847	877	884	720	759	806
55-64	795	850	862	619	624	666
65 and over ..	619	664	699	341	352	341

From Table IV above it will be seen that as a result of the maintenance of relatively high marriage rates generally, and in particular of an increase in the number of marriages at young ages, the married proportion to the rest has increased in all age-groups except for the oldest group of females. In the drop after the early 'fifties the high incidence of the termination of marriages by death is obviously the significant factor. In the youngest age-group of all the proportion married has more than doubled for both men and women since 1931.

Future prospects

The difficulty of determining whether fluctuations are fortuitous, or indicative of a short-term variation in the established pattern which will peter out with

little long-term effect on it, or the beginning of a new trend that will henceforward be steadily maintained or even accelerate slowly or rapidly, does not lessen the need at any one time for the best forecasting possible within the limits of available data.

The assumptions about future fertility, mortality and migration underlying the proportions of Table A5 in Part II of the 1961 *Statistical Review* are under continuous review and revisions are made as often as any change in current conditions appears to warrant them. As such a revision took place in 1962 and was published in the Registrar General's Return for the Fourth Quarter of 1962 while this Commentary was in the press, this revised population projection is here given as Table V overleaf.

This revision forecasts in Table V a larger total population in 1992 than had been reached on Table A5 (Part II, 1961) assumptions by 2001 and shows an average annual population increment of 536,000 for the decade 1992–2002, replacing that of 323,000 for 1991–2001. Over the whole forty-year period 1961–2001, population increases averaging out at well over 400,000 a year, replace Table A5 forecasts of gains averaging 301,000 a year. Neither of these latest projections envisages dependency increasing very much as a proportion of the total population by the end of the twentieth century. Men of working age (15–64), about 32 per cent of the total population in recent years, are expected to constitute a similar proportion for the remainder of the period subject to forecast, though the number—14,902,000 at mid-1961—will have reached 17,097,000 by 1982 and 20,564,000 by 2002.

Significance of the projections

By mid-1958 the pattern of population change in England and Wales had been well established for about half a century and had persisted in spite of several short-term contrary indications (e.g. the influx of refugees from the middle 'thirties, a flow of repatriates during and since the war years, the wartime absence of emigration, the short-lived "bulge" in births). At least until the 1961 Census had been taken, there was no compelling indication that the long-term image of our population growth needed to be radically changed. This was of a country whose population was continuing to grow steadily at a relatively slow and apparently slightly declining rate—averaging 194,000 a year from 1911 to 1931, 190,000 a year from 1931 to 1951, and 177,000 a year from 1951 to 1958. Apparently the Royal Commission's prognosis of a declining population was going to prove premature and could safely be regarded as successfully avoided by the course of events as far as the foreseeable future was concerned; but that was all.

Births

The actual annual births (*in thousands*) starting from 1951 have been: 678, 674, 684, 674, 668, 700, 723, 741, 749, 785, 811, 841. Looking in 1955 at the annual births in previous years there was no evidence to indicate the likelihood of the sharp rise in 1956 from 668 to 700 thousands. After a slackening of the rise in 1959, the further rapid rise in 1960 was equally unexpected. Changes of trend of this kind cannot be forecast. The official projection indicates what will happen if existing trends persist, *not* whether existing trends will change.

There are four main elements controlling the current annual flow of births. The number of women who marry, the age at which they marry, the overall size of family they produce, and the rate at which they produce it (the birth

Table V. Total population, projections from 30th June 1962 by sex and age, England and Wales

These projections have been prepared by the Government Actuary's Department in consultation with the General Register Office

Basis.—Mid-1962 estimate of Total population of England and Wales (*plus* members of H.M. Forces belonging to England and Wales and serving overseas but *minus* the Forces of other countries temporarily in England and Wales).

Assumptions (1962 Revision):

Mortality.—Death rates at the outset based on the experience in the five years 1957–61. At ages under 40, death rates are assumed to decline steadily over the period of the projection until, at the end of the forty years, they are one half or less of the rates now being experienced. At ages over 40 the assumed rates of decline become progressively smaller as the age advances until they vanish at ages over 90.

Nativity.—In view of the increased number of births registered in 1962 the assumptions made in the previous projection have been modified. The revised estimates give annual births of 853,000 in the year mid-1962 to mid-1963, an average of 870,000 a year in the next four years, and thereafter a gradual increase to 1,130,000 at the end of the century. (Male/Female ratio 1·06 throughout.)

Migration.—A net inward migration from other parts of the United Kingdom and all countries overseas of 100,000 in the year mid-1962 to mid-1963; in the longer term a notional inward balance of 50,000 a year has been incorporated.

*Projections involving children yet unborn are shown above the dotted line
(Figures in thousands)*

Estimated population as at 30th June 1962		Age-group	Projected populations at 30th June											
			1967		1972		1977		1982		1992		2002	
			Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1,942	1,841	0-	2,176	2,064	2,219	2,101	2,254	2,132	2,312	2,185	2,653	2,515	2,863	2,705
1,701	1,613	5-	1,944	1,843	2,174	2,065	2,220	2,100	2,253	2,136	2,461	2,330	2,800	2,649
1,772	1,690	10-	1,710	1,618	1,947	1,845	2,179	2,068	2,223	2,105	2,317	2,189	2,660	2,518
1,793	1,714	15-	1,785	1,698	1,718	1,623	1,955	1,851	2,186	2,072	2,266	2,142	2,476	2,338
1,518	1,457	20-	1,826	1,741	1,804	1,714	1,736	1,639	1,975	1,867	2,250	2,126	2,347	2,211
1,490	1,411	25-	1,569	1,479	1,855	1,751	1,833	1,727	1,769	1,651	2,238	2,102	2,319	2,172
1,516	1,472	30-	1,537	1,426	1,596	1,487	1,880	1,759	1,860	1,735	2,033	1,888	2,311	2,149

1,576	1,578	35-	1,540	1,477	1,549	1,427	1,607	1,489	1,892	1,762	1,809	1,663	2,278	2,113
1,590	1,605	40-	1,585	1,571	1,541	1,470	1,550	1,421	1,611	1,484	1,876	1,731	2,050	1,888
1,564	1,605	45-	1,577	1,584	1,569	1,552	1,526	1,452	1,537	1,406	1,879	1,740	1,804	1,648
1,570	1,635	50-	1,518	1,574	1,534	1,557	1,526	1,526	1,488	1,432	1,562	1,452	1,826	1,700
1,434	1,562	55-	1,478	1,585	1,433	1,529	1,455	1,515	1,450	1,488	1,434	1,358	1,767	1,689
1,134	1,383	60-	1,291	1,485	1,336	1,511	1,301	1,461	1,329	1,453	1,305	1,346	1,386	1,375
851	1,185	65-	958	1,271	1,096	1,369	1,142	1,398	1,118	1,356	1,155	1,337	1,166	1,233
606	951	70-	654	1,025	743	1,104	858	1,197	901	1,228	925	1,207	927	1,131
398	699	75-	404	736	440	798	505	866	589	945	618	956	660	964
201	407	80-	210	449	216	477	238	522	277	573	347	655	377	674
92	212	85 and over	95	241	100	271	105	292	116	322	158	396	177	423
22,748	24,020	All ages	23,857	24,867	24,870	25,651	25,870	26,415	26,886	27,200	29,286	29,133	32,194	31,580

Summary														
Number	per 1,000		Number	per 1,000	Number	per 1,000	Number	per 1,000	Number	per 1,000	Number	per 1,000	Number	per 1,000
46,768	1,000	Total	48,724	1,000	50,521	1,000	52,285	1,000	54,086	1,000	58,419	1,000	63,774	1,000
10,559	226	M and F under 15	11,355	233	12,351	244	12,953	248	13,214	244	14,465	248	16,195	254
9,483	203	M 15-44	9,842	202	10,063	199	10,561	202	11,293	209	12,472	213	13,781	216
9,237	198	F 15-44	9,392	193	9,472	187	9,886	189	10,571	195	11,652	199	12,871	202
5,702	122	M 45-64	5,864	120	5,872	116	5,808	111	5,804	107	6,180	106	6,783	106
4,802	103	F 45-59	4,743	97	4,638	92	4,493	86	4,326	80	4,550	78	5,037	79
2,148	46	M 65+	2,321	48	2,595	51	2,848	54	3,001	55	3,203	55	3,307	52
4,837	103	F 60+	5,207	107	5,530	109	5,736	110	5,877	109	5,897	101	5,800	91

spacing). For the first two factors we are on sure ground. Marriage rates have been very high and for the average spinster marriage prospects are about as high as they can be. The latest marriage rates imply that 96·4 per cent of spinsters will be married by the time they reach the 45-49 age-group. This proportion is unlikely to rise much higher. The rise in marriage rates has been most marked at the younger ages; the average age at marriage is falling. For a spinster marrying a bachelor the average age at marriage in 1946-50 was 23·8 years; in 1961 it was 22·4. As regards the fourth factor there are signs that married women are completing their families earlier in married life than their predecessors. But as to the third factor, the average size of completed family, there is very little evidence. This is because any trend takes time to emerge. It is not until the marriages of a particular year have been in existence for ten years or so and are getting near the end of their family building that their average size of family can be assessed. There has as yet been no indication of any substantial increase in average completed family size. The average size of family for the 1946 marriages (now of 17 years' duration) looks like being 2·2 children; the 1950 marriages are officially expected to have 2·3 children. The critical issue is whether the shorter birth spacing means more babies or the same number of babies in a shorter time. It does seem likely that in time the contribution to the family from the later years of marriage will shrink significantly; a levelling off of average family size at 2·4 seems probable. But it is important to remember that this contribution of the later years of marriage is still in the future and has made little impact on the *current* surge of births most of which is due not to larger families but to more marriages, earlier marriages and shorter birth spacing, i.e. to births occurring now which would have occurred later but for these trends. (These factors are examined in more detail in the Birth Chapter.)

Migration

The 1960 projection was the latest forecast available when the 1961 Census was taken and for some time afterwards and was the last to incorporate no direct assumption about migration either lessening or increasing the population change to be expected each year although, of course, official estimates of what had actually already happened were reflected in the starting population for each projection, which also had any estimated consequential change in the female population between 15 and 45 built into it.

The mid-1960 estimate of the total population of England and Wales implied an increase since mid-1951 of 1,855,000 persons, of whom only some 130,000 were not accounted for by excess of births over deaths. At the 1951 Census, after twelve years of documentation of population movement, the preliminary count led to the statement in the *Statistical Review*, 1951 (Text Volume, p. 9) that "an estimate of the expected numbers at census date is about 150,000, or one third of one per cent, in excess of those actually found". Since the 1951 Census, with the abolition of identity cards and food rationing early in the period, the estimating of population movement as it would be reflected if a census were taken at the date concerned had become a matter of increasing difficulty. The long run of passenger statistics available could not be regarded as a reliable measure of migration in either direction or even of the change in the visitor pool. In making estimates of migration balance it was necessary to supplement coverage of Long Sea Routes passengers from the Commonwealth

declaring themselves to be "migrants" with the scrutiny of a variety of other sources originating in this and other countries of partial coverage and incorporating an unknown measure of error. Each annual estimate involved a number of subjective judgments on either side of a balance sheet which, finally contrasting roughly 300,000 persons on one side with a similar number on the other, had resulted one year in a nil balance and in others in balances of *plus* 5,000 and *plus* 14,000, while yet another year had recorded a balance of *minus* 17,000. By contrast, a net gain of 108,000 persons from immigration had been estimated for the single year 1959-60.

In advance of the 1961 Census a formal estimate of the expected home population of England and Wales on 24th April 1961 was prepared on current methods, the anticipated figure being 46,051,000 persons. The preliminary figure from enumerators' summaries came to 46,071,604, suggesting a possible slight under-estimate of the effect of immigration over the decade. By the time the mid-1961 estimate was required, the availability of actual figures of births and deaths instead of registrations and some forecasting made it plain that the bulk of even this small difference was due to a slight under-estimate of natural change and amendments by then to the original Census total accounted for the remainder. Such precise coincidence may not, of course, persist when the exact number of persons enumerated finally emerges. Extrapolation from the mid-1958-59-60 estimates yields a very similar figure for Census date. However fortuitous, all this is singularly fortunate, for with evidence from the 1961 Census of other countries and later figures from returns in arrears when used for estimating, it has been possible to limit subjective judgment to *change* from a previous situation now reasonably accurately known and to have confidence in the migration elements in the mid-1961 and 1962 population estimates. Forecasts of future migration are another matter: all we can say is that net intake into our population from elsewhere (immigrants in *minus* former immigrants out) *plus* repatriates do not seem likely to be offset by English and Welsh emigrants in the foreseeable future and that the best way to give effect to this judgment, until the operation of the Commonwealth Immigration Act and other prospects become clearer, is to build into the projection from mid-1963 a purely notional element.

Table V represents the most recent appraisal of the present and expected situation for which 1961 Census data, the continued increasing flow of births and the very recent immigration picture are all of signal importance. The result is clearly of great importance to those concerned with the large number of plans completed or in process over the last few years, where any marked change from the old pattern of very gradual population increases becoming even more gradual than in earlier years would impair their validity. For such a marked change is clearly indicated. Put very generally we may say that the significance of what has actually happened and such assumptions as we are able to make from this means that during the nineteen-sixties our population will grow to a figure well over 2,000,000 in excess of what could have been foreseen in 1957.

Local authority area estimates

By the 1951 Census, not only national but local population changes had been covered for more than a decade by National Registration. Local comparisons of estimates and census enumerations were summarised in Table IV

of the 1951 Text Volume, Table V of which was able to attempt an analysis of the reasons why actual and expected local figures differed. With the preponderance of "Sub-division of Food Groups" and/or "Ration Books" as the cause of apparent error, the difference between the 1951 situation and that in 1961 is pinpointed.

Before the method used up to 1951 was replaced by that in current use, however, there was a brief interval of trying to make do with what was left of the records of internal migration. Compulsory notification of change of address disappeared with the end of the identity card system early in 1952. There remained food rationing evidence and the possibility of some help from the Registers of Electors (prepared since 1948 on the restored system of annual canvass) and the mid-1952 and 1953 estimates were the product of use of what was available. But the mass issue of new ration books in the Spring of 1953 proved to be the last and food rationing disappeared a year later.

The 1954 estimates were the first to use the present three- or four-stage method. Two separate provisional population estimates are first prepared for every local authority. First there is the "electoral change estimate". The logic behind this is very simple. When the home population of England and Wales at a mid-year has been estimated, the latest electoral figures available will be those from the *previous* October's canvass. If it can be assumed that there is no change in age structure or pace of movement the *relationship* between the two latest home population estimates will be very similar to that between the two most recent electorate figures, e.g.

$$\frac{\text{mid-1960 home population of England and Wales}}{\text{mid-1959 home population of England and Wales}} \text{ will equal } \frac{\text{October 1959 national electorate}}{\text{October 1958 national electorate}}$$

sufficiently approximately to make the following exercise worth while. The national electorate is simply the sum of locally compiled figures. For mid-1960, therefore, the factor resulting from the division of each local 1959 electorate by its 1958 equivalent is applied to the local starting population (normally its mid-1959 civilian estimate, but corrected where necessary for any errors or omissions which have come to light during the year past). The national total of these local figures will differ slightly from the agreed mid-1960 civilian population of England and Wales and controlling the local figures to the national estimate will spread this slight difference *pro rata* over the country.

Secondly the registration of births and deaths (carefully adjusted to allow for the occurrence of these events in hospitals, etc. which may be outside the area of the parent's or deceased person's normal residence) and the evidence submitted annually to the Registrar General by each local authority in reply to a standard questionnaire enable an estimate of the year's change in each area to be built up on its starting population. The co-operation of local authorities in supplying this information is invaluable. It relates to new housing, public and private, and its use for rehousing the existing population or for the intake of newcomers, any flow of persons from elsewhere into accommodation vacant during the year, planned overspill elsewhere, etc. The national total of these estimates is then adjusted to the control of the agreed civilian population of England and Wales.

If the two separate exercises yield figures differing only slightly from one another, the “electoral change estimate” and the “housing development estimate” are arranged to provide the preliminary new mid-year estimate for the area concerned. If the two figures differ more than slightly and in any other special circumstances, the case is referred for special examination. Typical reasons for the special examination procedure are the time-lag between electoral and population change in areas with much new housing for outsiders or with much planned overspill and the need to be particularly careful not to abuse the convenience of somewhat mechanical treatment to the extent of ignoring particular local circumstances. When the civilian estimates have been agreed, non-civilians must be added to provide “home” or actual population estimates.

Clearly the current methods are unlikely to lead to results as accurate as local and national figures alike based on continuous adjustment undertaken locally to a national registration base. In 1951 it was possible to compare the actual and expected local figures at Census Day itself. Because so important a part is now played by local authority evidence submitted annually in relation to mid-year to mid-year change, the nearest comparison for 1961 will be actual and expected local populations at 30th June 1961. This contrasts the “normal” estimate for mid-1961 which would have been made had there been no Census with the Census data extrapolated to mid-1961. This is done in Table VI below.

A summary of the situation in the two years shows the following percentages of Local Authorities affected by the Table VI distribution, compared with similar data for 1951 as published in Table IV of the 1951 Text Volume:

“Expected” differing from “actual” local populations in the following percentage of cases

		By less than 2% either way	By less than 3% either way	By 5% or more either way
		%	%	%
All areas	1951	76	87	5
	1961	52	68	11
Larger urban areas	1951	91	96	2
	1961	65	81	3
Urban areas under 50,000	1951	77	87	5
	1961	52	69	11
Rural areas	1951	67	82	7
	1961	46	61	15

The following are the main causes of the differences revealed above; it is extremely difficult in individual cases, and therefore in general, to discover which causes have been operating or which are more important:

- (i) margins of error in the estimation by the local authority of persons affected by housing development;
- (ii) the essential lack of information about actual outward migration, especially by persons under 21 or others whose movement was unsuspected by local authorities and unrecorded;

Table VI. Distribution of percentage differences between actual and expected population estimates 1961, administrative areas of England and Wales

Type of area	Expected figure <i>less</i> than revealed by Census by percentage below											All areas	Expected figure <i>greater</i> than revealed by Census by percentage below																		
											Total under																				
	13-14	10-11	9	8	7	6	5	4	3	2			1	0	Total over	0	1	2	3	4	5	6	7	8	9	10	11	12-13	14	15-16	17-18
Urban, with population: 100,000 and over	—	—	—	—	—	—	1	2	3	4	12	18	40	79	39	19	9	6	3	1	1	—	—	—	—	—	—	—	—	—	—
50,000-100,000	—	—	—	—	—	1	1	5	5	13	20	18	63	125	62	21	16	9	13	1	—	2	—	—	—	—	—	—	—	—	—
under 50,000	1	1	1	2	5	10	15	37	48	70	77	115	382	789*	404	140	79	62	46	27	17	10	8	3	3	3	—	1	1	1	1
Rural	—	—	1	2	1	1	11	13	26	27	47	43	172	474	302	75	53	45	47	29	16	15	10	4	2	2	1	2	—	—	1
Total	1	1	2	4	6	12	28	57	82	114	156	194	657	1,467*	807	255	157	122	109	58	34	27	18	7	5	5	4	2	1	1	2

* Includes three areas where actual and expected estimates coincided precisely.

- (iii) the uneven quality of electoral change information;
- (iv) unsuspected changes in the elements entitling a local authority to special additions to their resident population, e.g. the full strength of all naval, military and air establishments in the area at dates other than those for which regular information has been supplied, the full term-time complement of boarding schools, university lodging, etc., the long-term institutional population (hospitals, nursing homes, prisons, etc.).

Most of these elements of error are permanent, and cumulative. Although each local estimate when made is fully consistent with all the information, it remains inevitable that within a few years of a census a degree of error must be involved. The error is not revealed and cannot therefore be corrected, until the next census. Moreover even when a subsequent census has revealed the extent of error it is difficult if not impossible to pinpoint the timing of the intrusion of error.

MARRIAGES

During 1961 there were 346,678 marriages in England and Wales, 3,064 more than in 1960. Table VII shows that the marriage rate per 1,000 total population remained unchanged. The marriage rate per 1,000 unmarried men aged 15 and over fell slightly compared with 1960; there was an equally small rise in the corresponding rate for women. The marriage rate per 1,000 unmarried women aged 15-39, an age-group which accounts for about 90 per cent of all marriages, also rose compared with 1960 and there was a very slight rise in the corresponding rate for unmarried men aged 20-44.

Table VII. Numbers of marriages and marriage rates, 1931 and 1938 to 1961, England and Wales

Period	Marriages	Marriage rates					
		Per 1,000 total population	Per 1,000 unmarried population				
			Men aged 15 and over	Women aged 15 and over	Men aged 20-44	Women aged 15-39	
1931	311,847	15·6	53·4	41·6	106·4	68·6	
1938	361,768	17·6	61·2	47·8	124·5	85·5	
1939-50*	381,910	17·9	68·2	53·0	139·7	106·2	
1951-55*	350,916	15·8	68·4	51·4	129·9	110·6	
1956	352,944	15·7	70·9	53·0	138·9	120·7	
1957	346,903	15·4	70·3	52·4	138·9	121·5	
1958	339,913	15·0	69·0	51·5	137·7	120·2	
1959	340,126	14·9	68·7	51·3	138·9	119·2	
1960	343,614	15·0	68·9	51·6	141·5	119·9	
1961	346,678	15·0	68·3	52·0	141·7	121·5	

* Annual averages.

Among the 346,678 marriages celebrated in 1961, 294,018 were between bachelors and spinsters, comprising 85 per cent of the total. A further 10 per cent of all marriages were those where one partner was marrying for the first time but the other was remarrying. In the remaining 6 per cent of marriages both partners were remarrying.

First marriages

Bachelors

Among the men who married during 1961, 308,843 (89 per cent) were bachelors of whom 95 per cent married spinsters. Among the bachelors who did not marry spinsters, twice as many married divorced women as married widows.

Table VIII. Proportional distribution of first marriages by age-group per 1,000 at all ages, and average age at marriage, 1931 and 1938 to 1961, England and Wales

Period		Age at marriage							Average age at marriage	
		15-	20-	25-	30-	35-	45-	55 and over		Not stated
BACHELORS										
1931	..	19	371	410	122	55	14	6	3	27·30
1938	..	17	339	413	146	64	13	5	3	27·72
1939-50	..	29	421	333	122	71	15	5	4	27·06
1951-55	..	31	478	304	104	59	17	5	2	26·55
1956	..	43	502	286	93	53	17	5	1	26·15
1957	..	49	508	279	90	53	15	5	1	26·03
1958	..	56	520	268	84	51	15	5	1	25·86
1959	..	57	529	261	83	50	14	5	1	25·77
1960	..	59	534	258	79	49	14	6	1	25·68
1961	..	69	529	255	78	48	14	6	1	25·59
SPINSTERS										
1931	..	98	480	283	78	41	11	4	5	25·47
1938	..	112	460	278	86	45	11	4	4	25·58
1939-50	..	156	504	201	67	48	14	5	5	24·75
1951-55	..	186	537	161	54	38	16	6	2	24·18
1956	..	225	530	142	47	33	15	6	2	23·73
1957	..	237	529	134	45	33	14	6	2	23·60
1958	..	250	527	128	42	31	14	6	2	23·46
1959	..	252	534	121	41	30	13	7	2	23·37
1960	..	264	529	117	40	30	13	6	1	23·26
1961	..	287	511	115	38	29	12	7	1	23·13

Table IX. First marriage rates by sex and age with ratios to those of 1938 taken as 100, 1931 and 1938 to 1961, England and Wales
The ratios were calculated using unrounded rates

Marriage rate per 1,000 population over 15	Marriage rates per 1,000 single population in each age-group						Period	Ratios of rates to those of 1938 taken as 100								
	15-	20-	25-	30-	35-	45- and over		15-	20-	25-	30-	35-	45- and over	55 and over	All ages*	
BACHELORS																
56.0	3.3	72.3	152.3	111.5	49.8	16.4	5.4	1931	100	83	86	87	87	89	114	86
64.8	3.2	87.0	176.8	127.5	57.0	18.5	4.8	1938	100	100	100	100	100	100	100	100
71.2	6.4	112.1	175.6	128.3	61.2	20.8	5.1	1939-50	198	129	99	101	107	113	107	113
70.8	6.7	131.8	174.4	107.3	48.9	18.3	5.1	1951-55	205	152	99	84	86	99	106	117
73.6	11.0	153.1	187.4	105.7	44.7	16.5	4.8	1956-60	339	176	106	83	78	90	101	132
72.7	11.5	154.1	187.6	103.8	43.3	16.1	4.8	1959	354	177	106	81	76	87	100	133
72.8	11.7	157.8	190.9	104.0	43.4	16.0	4.8	1960	359	181	108	82	76	87	101	136
72.1	13.2	158.9	189.4	103.7	42.6	15.8	4.8	1961	405	183	107	81	75	86	100	137
SPINSTERS																
51.7	17.1	106.8	119.1	57.2	21.3	7.9	2.2	1931	76	72	77	85	83	92	108	76
61.4	22.6	147.9	154.0	67.2	25.7	8.6	2.0	1938	100	100	100	100	100	100	100	100
69.5	36.8	191.1	153.3	72.8	28.9	10.2	2.0	1939-50	163	129	100	108	112	119	100	123
71.9	43.9	231.9	157.2	75.1	29.4	10.4	2.1	1951-55	194	157	102	112	115	122	102	143
77.4	56.6	264.8	169.9	80.7	30.5	10.2	2.2	1956-60	251	179	110	120	119	119	107	169
77.1	56.5	265.4	171.2	81.1	30.3	9.9	2.3	1959	250	179	111	121	118	115	112	171
77.8	57.7	267.8	172.7	85.7	31.4	10.4	2.2	1960	256	181	112	128	122	122	108	175
78.8	60.8	271.7	179.4	88.7	32.2	10.5	2.3	1961	269	184	116	132	125	122	113	181

* Age-standardised.

The proportional age distribution of both bachelors and spinsters and their average ages at marriage are shown in Table VIII for 1961 with similar figures for earlier years. The average age of bachelor bridegrooms was 25·6 years, slightly lower than 1960. The gradual reduction in the average age of bachelor bridegrooms in recent years has persisted. Reference to Table L of Part II shows that the average age for bachelors who marry spinsters was 25·0 years; this also was in line with the declining trend of recent years. The average age at marriage for bachelors marrying widows (42·0 years) is a little higher than the 1960 figure while the average age at marriage for bachelors marrying divorced women at 33·7 years is fractionally lower than the 1960 figure.

The reduction in the age at marriage shows more clearly in the proportional distribution by age of bachelor bridegrooms. Since the period before the Second World War the proportion of bachelor bridegrooms at ages 20–24 has risen from just over a third to over a half, while the proportion of bachelor bridegrooms aged 25–29 has fallen from just over 40 per cent to just over a quarter. The same tendency to younger age at marriage is demonstrated by the age-group marriage rates shown in Table IX. This table shows a striking increase in the marriage rates of bachelors under the age of 25 and particularly under the age of 20, while the rates for ages 30–54 have tended to fall. The rates for 1961 are slightly above the corresponding rates for 1960 for marriages under 25 but have fallen slightly for older marriage ages. The bachelor marriage rate for all ages over 15 combined was a little lower than in 1960. The equivalent ratio roughly standardised for age (that is the ratio of the actual rate for all ages over 15, shown in the first column of Table IX, to the rate which would have resulted if the 1938 age rates had been in operation) was, however, higher in 1961 than in 1960 owing to the greater weight given to young marriages in this ratio.

The rates in Table IX and other tables for years since 1951 may differ slightly from those already published for those years, due to revision of the estimates of the population by sex, age and marital condition on which they are based for the years in question.

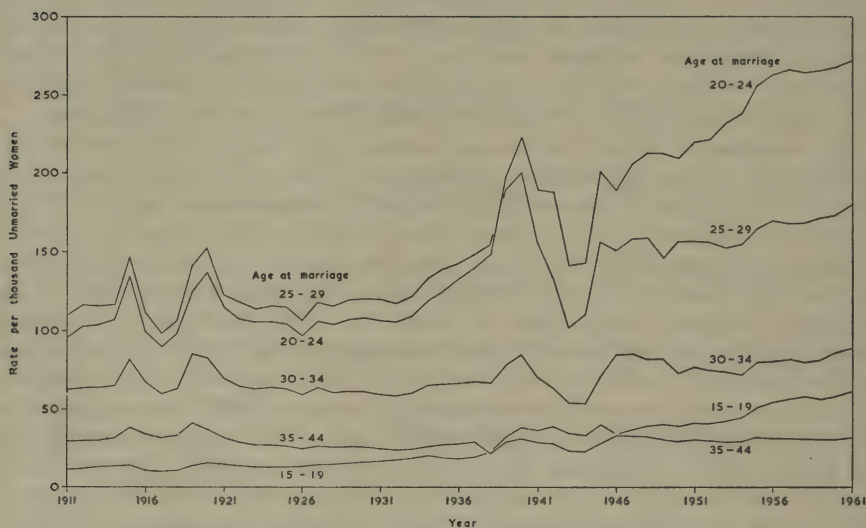
Spinsters

Spinster brides formed 90 per cent of all women who married in 1961. Of all spinster brides 94 per cent married bachelors, the remainder being divided between those who married widowers and those who married divorced men in a ratio of 4 to 6. The average age of spinster brides was 23·1 years, 2·5 years younger on average than bachelor bridegrooms. The average age of spinsters who married bachelors was 22·4, 2·7 years younger than the average age of their husbands. All this is part of the downward trend in marriage ages. There are exceptions in special groups. The average age of spinsters marrying widowers, at 43·6 years, is tending to rise (as is also the average age of bachelors marrying widows).

The reduction in the age at marriage since before the Second World War is even more marked for spinsters than for bachelors. Nearly 29 per cent of spinster brides in 1961 were under 20 years of age compared with 10 per cent in 1931 and 11 per cent in 1938. This period has also seen a steady decline in the proportion of spinster brides aged 25–29 which tends to balance the rise in the proportion under 20. In contrast to the experience of bachelors, Table IX and Diagram 1 show that since before the Second World War marriage rates have risen at all ages. The rise has been proportionately much greater at the

youngest ages. Compared with 1960, the 1961 rates have risen slightly at all ages. The spinster marriage rate per 1,000 single women over the age of 15 rose a little compared with 1960 and the age standardised ratio (already described) rose from 175 to 181.

Diagram 1



Marriage rates* of women by age, 1911 to 1961, England and Wales

Minors

During 1961 there were 42,769 marriages in which the bridegroom was aged under 21 and 130,400 where the bride was aged under 21. These numbers correspond with 40,160 and 125,096 respectively in 1960. Among the brides under 21 years of age 21,176 were aged 16 or 17 and 28,712 were 18 years old. Brides marrying under 21 outnumbered bridegrooms by just over three to one, this ratio having fallen from nearly five to one in 1938 and over four to one in 1954.

The bridegroom was a minor in 12·3 per cent of all marriages in 1961 compared with 11·7 per cent in 1960 and 6·9 per cent in 1954. Three in every eight of all 1961 brides were minors; a slight increase on 1960. The proportion has risen from 28·6 per cent in 1954. These increases illustrate in another way the general tendency to younger marriage.

There were 36,100 marriages where both the bride and the bridegroom were under the age of 21. This represents 10·4 per cent of all marriages and constitutes 28 per cent of all the marriages where the bride was a minor.

Remarriages

During 1961 there were 37,835 men who remarried, of whom 19,085 were widowers and 18,750 were divorced men; 34,421 women remarried, 16,452 being widows and 17,969 divorced women. Combined remarriage rates for both widowed and divorced men and women are shown in Table X for 1961 and also

* 1911-37: all marriages per 1,000 spinsters, widows and divorced women. 1938-61: first marriages per 1,000 spinsters.

Table X. Remarriage rates by sex and age with ratios to those of 1938 taken as 100,
1931 and 1938 to 1961, England and Wales

The ratios were calculated using unrounded rates

Marriage rate per 1,000 popula- tion over 15	Remarriage rate per 1,000 widowed and divorced population in each age-group						Ratio of rates to those of 1938 taken as 100						
	Period						20-*	25-	30-	35-	45-	55 and over	All ages†
	20-*	25-	30-	35-	45-	55 and over							
WIDOWED AND DIVORCED MEN													
35.8	139.2	172.7	189.2	133.5	67.6	14.9	91	99	76	87	85	94	88
38.1	153.6	174.5	248.0	152.6	79.1	15.9	100	100	100	100	100	100	100
50.5	217.6	425.9	338.1	214.8	106.0	17.6	142	244	136	141	134	111	133
55.4	253.0	355.8	339.4	210.7	116.1	19.7	165	204	137	138	147	124	139
48.4	391.9	338.2	305.6	173.7	98.9	20.4	255	194	123	114	125	128	126
47.5	503.2	349.2	305.2	169.5	94.9	20.8	328	200	123	111	120	131	125
47.9	504.4	363.9	326.7	168.6	96.6	21.1	328	209	132	110	122	133	128
48.0	464.1	373.6	349.9	177.7	92.6	21.2	302	214	141	116	117	134	130
WIDOWED AND DIVORCED WOMEN													
9.8	128.2	138.8	94.1	36.5	14.1	2.2	65	81	82	73	96	89	82
10.2	197.1	172.4	114.2	50.1	14.7	2.5	100	100	100	100	100	100	100
15.7	294.0	308.6	170.3	73.0	21.6	2.7	149	179	149	146	146	109	145
16.1	374.7	323.0	190.6	85.0	29.2	3.0	190	187	167	170	198	122	167
13.2	427.7	339.7	220.0	81.1	29.6	3.0	217	197	194	162	200	123	168
12.7	453.5	326.1	235.6	79.9	29.9	3.0	230	189	206	159	203	123	168
12.7	458.4	337.3	239.6	81.7	30.1	3.2	233	196	210	163	204	128	172
12.7	400.0	347.4	255.4	81.3	30.9	3.2	203	202	224	162	209	131	174

* Based on small numbers.

† Age-standardised.

for earlier periods from 1931. The remarriage rate of 1,000 population over 15 and the equivalent ratio roughly standardised for age were virtually unchanged from 1960. The rates for men rose except those for the under 25 and 45-54 age-groups and the same was true for women. The rates for the 20-24 age-group for both men and women are subject to considerable fluctuations which arise from the small numbers at risk.

Widowed persons

Among the 19,085 widowers who remarried during 1961, 48 per cent married widows, 37 per cent married spinsters and 15 per cent married divorced women. A similar classification of the widows who remarried in 1961 shows that 55 per cent married widowers, 30 per cent married bachelors and 15 per cent married divorced men. These proportions are similar to those of recent years. For the last thirty years a higher proportion of widowers have married spinsters than widows have married bachelors, although the former proportion has fallen from over 60 per cent between 1926 and 1940 to the current level of about 40 per cent. The proportion of widows who marry bachelors has fallen since 1950 from just under a half to the current level of about 30 per cent. A large part of the decline in the proportion of widowed persons who marry spinsters and bachelors corresponds to the rise in the proportion who marry divorced persons but there has also been a slow rise in the proportion of widowed persons who intermarry.

The proportional age distributions of widowed persons who remarried in 1961 and also during selected periods since 1931 are shown in Table XI.

Table XI. Proportional age distribution per 1,000 at all ages and average age at remarriage of widowed persons, 1931 and 1938 to 1961, England and Wales

Period	Age at remarriage											Average age at remarriage
	Under 25	25-	30-	35-	40-	45-	50-	55-	60-	65 and over	Not stated	
WIDOWED MEN												
1931 ..	6	45	96	112	119	126	135	123	94	122	22	49·43
1938 ..	6	42	89	110	112	124	128	125	103	137	23	50·21
1939-50..	6	37	72	99	111	123	131	129	110	160	22	50·86
1951-55..	3	23	49	65	92	117	141	143	129	221	17	54·59
1956-60..	3	15	33	53	69	107	138	164	145	256	17	56·52
1959 ..	3	16	29	54	64	102	137	163	147	268	17	56·97
1960 ..	3	15	28	52	62	103	137	169	151	264	16	57·01
1961 ..	1	11	29	48	64	98	135	164	160	276	14	57·51
WIDOWED WOMEN												
1931 ..	14	76	135	168	153	144	114	70	52	57	17	44·48
1938 ..	19	71	115	150	148	142	119	86	59	72	19	45·58
1939-50..	50	124	133	128	125	126	102	76	58	61	17	43·19
1951-55..	13	52	101	117	132	142	138	105	87	98	15	48·09
1956-60..	14	37	61	97	118	151	146	125	112	123	15	50·45
1959 ..	15	37	58	94	109	151	149	124	116	131	16	50·86
1960 ..	17	37	52	87	109	153	147	128	125	132	13	51·08
1961 ..	12	32	51	83	108	155	149	127	128	143	12	51·65

In 1961 44 per cent of the widowers who remarried were 60 years of age and over. This compared with 27 per cent of the widows. It is clear from Table XI that the widows who remarried in 1961 had a younger age distribution than the widowers. The average age at remarriage for widowers was 58 years compared with 52 for widows. This age difference of six years is greater than the average difference in age at marriage of spinsters and bachelors. This is generally to be expected; widowers tend to be older at marriage than bachelors and hence a higher proportion of their possible marriage partners will be younger than they are; i.e. there are more younger than older women to choose from. The older the widower the greater the possible difference in age between him and his partner.

An attempt has been made to compute remarriage rates for the widowed and divorced separately for years since 1951. These are rather tentative estimates, particularly at the younger ages, but probably give the correct impression of the main differentials. The figures are shown for ages over 25 in Table XII.

Table XII. Remarriage rates of widowed and divorced persons by sex and age, 1951 to 1961, England and Wales
Per 1,000 population in each group by age and condition

Men						Period	Women					
All ages	25–	30–	35–	45–	55 and over		All ages	25–	30–	35–	45–	55 and over
WIDOWED												
31	227	201	148	92	18	1951–55	8	188	118	55	23	3
29	217	187	137	83	19	1956	7	277	141	56	23	3
29	220	176	133	85	18	1957	7	278	156	54	23	3
28	217	156	129	81	18	1958	6	220	157	51	22	3
29	268	156	130	81	19	1959	7	235	195	53	23	3
29	257	170	131	84	19	1960	7	231	197	55	24	3
29	182	183	137	82	20	1961	7	180	209	56	25	3
DIVORCED												
234	397	398	254	178	82	1951–55	137	383	241	135	67	20
191	343	358	212	150	71	1956	116	381	244	122	60	18
175	346	346	200	131	64	1957	107	361	238	117	58	17
161	364	336	187	119	59	1958	99	350	239	110	53	16
160	366	361	190	116	57	1959	97	351	249	111	54	16
158	385	384	188	116	57	1960	95	368	253	112	51	16
157	411	407	197	108	52	1961	94	405	269	109	51	15

Over the age of 35 the remarriage rates of widowers have been considerably higher than the corresponding rates for widows and the all ages rate for widowers has been three or four times that for widows. Since 1951 there appears to have been a tendency for the remarriage rate of widowers to fall. The rate for widows under the age of 35 has tended to rise while the rates for widows over the age of 35 have remained relatively stable; it has already been shown in Table XI that young widows form a small, and decreasing, proportion of all widows remarrying.

Divorced persons

Among the 18,750 divorced men who remarried during 1961, 59 per cent married spinsters, 13 per cent married widows and the remaining 28 per cent married divorced women, while of the 17,969 divorced women who remarried, 55 per cent married bachelors, 16 per cent married widowers and 29 per cent married divorced men. The proportional distribution of marriages of divorced men according to the prior marital condition of their marriage partner was similar to those of recent years, although the last thirty years have seen a fall in the proportion of divorced men who marry spinsters from nearly 80 per cent to the present level of 59 per cent. This decline is accounted for by the increased frequency of divorce during this period with the consequent rise in the proportion who marry divorced women because there are more divorced persons in the population to remarry. The distribution of marriages of divorced women according to the prior marital condition of their marriage partner in 1961 is also similar to those of recent years and the main feature of the last thirty years has again been the increase in the proportion of divorced women who marry divorced men; this proportion has recently been at a level which is two and a half times that which obtained in the 1926-30 period. The main compensating fall has been in the proportion of divorced women who marry bachelors.

Table XIII shows the proportional age distribution of divorced men and women who remarried in 1961 and in earlier years going back to 1941-45.

Table XIII. Proportional age distribution per 1,000 at all ages and average age at remarriage of divorced persons, 1941 to 1961, England and Wales

Period	Age at remarriage											Average age at remarriage
	Under 25	25-	30-	35-	40-	45-	50-	55-	60-	65 and over	Not stated	
DIVORCED MEN												
1941-45..	11	78	196	247	202	135	73	35	15	7	1	40·34
1946-50..	12	150	242	236	168	102	51	23	10	5	1	38·16
1951-55..	11	117	223	206	181	129	75	34	15	9	0	39·70
1956-60..	15	118	194	199	161	140	92	49	20	12	0	40·58
1959 ..	14	114	192	206	154	137	96	51	23	12	1	40·79
1960 ..	16	119	187	198	151	139	98	54	23	14	1	40·84
1961 ..	18	126	195	193	156	128	94	52	24	14	0	40·52
DIVORCED WOMEN												
1941-45..	30	169	262	229	161	87	37	16	6	1	2	36·79
1946-50..	66	285	251	188	109	60	26	9	4	1	1	34·25
1951-55..	49	213	260	187	137	85	42	17	6	3	1	36·09
1956-60..	57	191	215	196	140	105	57	24	10	4	1	37·13
1959 ..	57	185	208	200	136	109	62	26	11	5	1	37·42
1960 ..	62	191	201	193	139	108	60	28	11	6	1	37·33
1961 ..	69	193	204	180	137	107	61	30	11	7	1	37·23

This table shows that nearly two in every five divorced persons who remarried in 1961 were between the ages of 30 and 39 (compared with only 11 per cent of bachelors and 6 per cent of spinsters). The age distribution of divorced men is rather older than that of divorced women and the average

age at marriage of divorced men who remarried in 1961 was 41 compared with 37 for divorced women. The age distribution of remarriages of divorced men and women in 1961 was slightly older than that for 1941–45 period but the main difference is the lower degree of concentration into the 25–49 age-group for men and the 30–44 age-group for women.

Separate remarriage rates for divorced men and women are shown in Table XII. The remarriage rates for divorced men and women have been much higher than those for widowed men and women at all ages. These high rates point to a relatively short average interval between divorce and remarriage and this is particularly marked at the younger ages. For both men and women the rates decline with age, rapidly up to the age of 35 and then more slowly. The remarriage rates of divorced men are higher than those for divorced women at all the ages shown in Table XII.

Since 1951 the remarriage rates of divorced men aged 30 and over have declined and a similar, but less well marked, trend is apparent for divorced women. Because of the tentative nature of these estimates, annual variations in the rates should be treated with some caution.

Marriage age of brides and bridegrooms in combination

Table J in Part II shows the ages in combination of persons who marry. For 1961 this table has been classified according to prior marital condition to identify the following groups: (i) bachelors marrying spinsters; (ii) bachelors marrying widowed and divorced women; (iii) spinsters marrying widowed and divorced men; (iv) widowed and divorced men marrying widowed and divorced women. The separate tables appear in Appendix C to this volume.

Table XIV shows the proportional age distribution of spinsters who married bachelors of a given age and Table XV a similar distribution of the bachelors who married spinsters of a given age. In addition to these age distributions these tables also show the average age of spouse and, to give an indication of the variation of the age of spouse, the standard deviation of the age distribution is shown. Tables XVI and XVII show similar figures for widowed and divorced men who married widowed and divorced women.

Among the marriages of bachelors and spinsters distributed in Table XIV, 81 per cent of the bridegrooms who were under 20 married brides who were also under 20. Apart from those marrying at 18 or younger, bridegrooms tended to marry brides younger than themselves, the average age difference increasing with age. Nearly half the small number of 16-year-old bachelor grooms married spinster brides of the same age. The variation in bride's age naturally tends to increase with increasing age of bachelor grooms, the standard deviation of the distribution increasing from one or two years for bachelors marrying under 20 to nearly nine years for bachelor grooms aged 45–49 and well over ten years for those aged 50 or over. Table XV shows the other side of the picture—the distribution of the ages of bachelor grooms who married spinster brides of a given age or age-group. On the whole spinster brides tend to be younger than their bachelor grooms. Spinster brides of 16 were on average four years younger than their grooms and this difference narrowed to two years for those brides aged 24. As the age of bride increases the difference decreases further until brides aged 35–39 marry bachelor grooms of the same average age while those brides marrying over 40 tend to marry a bachelor younger than

Table XIV. Proportional age distribution per 1,000 at all ages of spinsters who married bachelors of a given age, 1961, England and Wales

Age of wife	Age of husband																	Age of wife
	Age of husband																	
	16	17	18	19	20	21	22	23	24	Under 20	20-	25-	30-	35-	40-	45-	50 and over		All ages
16	484	290	172	90	45	22	14	10	7	138	18	4	2	1	—	—	—	21
17	242	352	282	191	112	66	46	35	26	233	53	15	7	3	2	1	1	50
18	204	210	277	253	205	144	110	92	69	255	118	45	19	10	5	3	1	97
19	50	87	139	225	240	212	173	144	120	185	174	82	37	18	5	3	1	133
20	6	31	65	119	189	200	187	165	149	93	178	108	53	24	9	3	3	137
21	3	15	35	65	114	183	199	195	186	51	181	155	86	44	23	8	5	151
22	6	9	15	28	47	86	132	142	152	22	117	138	90	42	19	14	3	109
23	3	3	6	15	23	41	66	101	112	11	71	118	88	44	29	17	4	78
24	—	2	2	7	12	20	33	51	76	5	40	92	86	57	25	18	6	54
Under 20	980	939	870	759	602	444	343	281	222	811	363	146	65	32	12	9	3	301
20-	18	60	123	234	385	530	617	654	675	182	587	611	403	211	105	60	21	529
25-	3	2	6	8	13	22	36	59	92	6	46	202	319	283	186	112	37	111
30-	—	—	1	1	1	2	3	5	1	1	4	35	154	246	248	173	57	20-
35-	—	—	—	—	—	—	—	—	1	—	—	5	46	159	234	232	123	20-
40-	—	—	—	—	—	—	—	—	—	—	—	1	9	51	137	179	143	30-
45-	—	—	—	—	—	—	—	—	—	—	—	—	2	14	54	154	217	35
50 and over	—	—	—	—	—	—	—	—	—	—	—	—	1	4	24	82	399	45
All ages	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Average age of wife	17.42	17.84	18.42	19.07	19.77	20.46	21.00	21.51	22.04	18.76	21.03	23.36	26.43	30.19	34.28	38.27	47.35	22.38
Standard deviation of distribution (years)	1.29	1.32	1.63	2.03	1.93	2.10	2.32	2.52	2.76	1.73	2.61	3.57	5.08	6.48	7.55	8.56	10.65	5.12

Table XV. Proportional age distribution per 1,000 at all ages of bachelors who married spinsters of a given age, 1961, England and Wales

Age of husband	Age of wife																	Age of husband
	Age of wife																	
	16	17	18	19	20	21	22	23	24	Under 20	20-	25-	30-	35-	40-	45-	50 and over		All ages
16	27	6	2	—	—	—	—	—	—	4	—	—	—	—	—	—	—	1
17	93	47	15	4	—	1	—	—	—	21	—	—	—	—	—	—	—	7
18	168	115	59	21	10	5	3	2	1	59	5	1	—	—	—	—	—	21
19	186	166	114	74	38	19	11	8	6	110	19	3	1	—	—	—	—	44
20	155	161	154	130	100	55	31	21	16	145	52	9	3	2	—	—	—	73
21	131	162	185	197	181	150	98	65	46	183	124	25	8	3	—	—	—	124
22	85	113	142	162	170	165	151	105	75	142	145	41	12	3	—	—	2	125
23	60	84	116	132	147	158	159	158	117	114	151	65	20	6	—	—	—	122
24	34	55	76	96	117	132	150	154	151	79	137	89	28	8	5	2	—	107
Under 20	474	334	190	99	50	25	15	10	7	194	25	4	1	—	—	—	—	73
20-	465	575	673	717	715	660	589	503	405	663	609	229	71	22	9	4	2	551
25-	53	78	119	157	203	265	325	387	439	124	297	468	274	102	35	20	5	257
30-	7	10	14	20	28	41	59	81	114	16	55	207	341	247	127	56	20	72
35-	1	2	3	4	5	8	10	15	28	3	11	68	200	314	255	120	33	27
40-	—	—	1	—	1	2	2	4	5	—	2	17	78	178	263	180	85	10
45-	—	—	—	—	—	—	1	—	2	—	1	5	28	90	174	260	147	5
50 and over	—	—	—	—	—	—	—	—	1	—	—	2	9	47	137	360	709	5
All ages	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Average age of husband	20.69	21.52	22.41	23.09	23.72	24.48	25.19	25.90	26.74	22.44	24.87	28.64	32.87	37.53	41.90	46.83	54.94	25.04
Standard deviation of distribution (years)	2.79	2.91	3.01	3.00	3.14	3.27	3.32	3.62	3.88	3.07	3.50	4.71	5.98	6.96	7.67	8.20	9.76	6.09

Table XVI. Proportional age distribution per 1,000 at all ages of widowed and divorced women who married widowed and divorced men of a given age, 1961, England and Wales

Age of wife	Age of husband										Age of wife	
	Under 25	25-30	30-35	35-40	40-45	45-50	50-55	55-60	60-65	65-70	75 and over	All ages
Under 25	481	164	63	21	10	4	1	—	—	—	—	11
25-30	296	417	287	132	60	28	8	3	—	—	—	48
30-35	74	237	350	281	143	88	31	11	—	—	3	83
35-40	111	116	186	301	269	183	95	37	18	5	4	113
40-45	—	37	70	173	283	233	177	97	44	6	9	125
45-50	—	18	33	76	157	279	289	221	122	64	10	155
50-55	—	8	10	14	61	134	245	267	205	110	61	138
55-60	37	—	2	2	12	39	109	229	256	162	104	110
60-65	—	3	—	—	3	9	35	102	246	304	240	170
65-70	—	—	—	1	1	2	6	30	80	252	294	102
70 and over	—	—	—	—	—	1	3	5	18	76	257	69
											432	45
All ages	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Average age of wife	28.13	30.43	32.85	36.39	40.29	43.80	48.06	52.33	56.28	61.02	64.93	49.16
Standard deviation of distribution (years)	7.36	5.95	6.01	6.30	6.90	7.38	7.35	7.32	7.71	7.60	7.50	8.06
												12.40

Table XVII. Proportional age distribution per 1,000 at all ages of widowed and divorced men who married widowed and divorced women of a given age, 1961, England and Wales

Age of husband	Age of wife											Age of husband	
	Under 25	25-	30-	35-	40-	45-	50-	55-	60-	65-	70 and over		All ages
Under 25	60	9	1	1	—	—	—	—	—	—	—	1	Under 25
25-	287	168	56	20	6	2	1	—	1	—	—	20	25-
30-	329	346	246	96	33	12	4	—	4	—	—	58	30-
35-	167	244	303	239	124	44	9	1	9	—	—	90	35-
40-	93	127	177	244	232	104	46	11	3	1	—	102	40-
45-	46	72	134	205	237	227	123	45	12	3	3	127	45-
50-	19	22	52	116	195	256	245	136	48	13	8	138	50-
55-	—	5	18	47	110	201	275	293	141	61	15	142	55-
60-	—	6	11	20	43	97	183	284	295	141	50	123	60-
65-	—	—	1	9	15	39	77	140	283	348	163	96	65-
70-	—	—	—	3	3	14	28	61	151	273	371	64	70-
75 and over	—	—	1	1	3	3	8	27	67	158	390	40	75 and over
All ages ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	All ages
Average age of husband ..	33.39	35.93	39.40	43.66	47.69	52.27	56.32	60.40	65.07	69.04	73.39	53.51	Average age of husband
Standard deviation of distribution (years)	6.48	6.79	7.46	8.04	8.05	7.95	7.60	7.06	6.75	6.49	6.22	12.72	Standard deviation of distribution (years)

themselves. Of the spinsters in Table XV who marry under the age of 20, 86 per cent married bachelors under 25 years of age while 99 per cent of the bachelors in Table XIV who married under 20 married spinsters under 25. This illustrates the tendency, which applies generally under the age of 45, that for a given age of spouse, the age distribution of wives has a smaller amount of variation than the age distribution of husbands.

In Table XVI the widowed or divorced bridegrooms were slightly younger than their widowed or divorced brides on average up to age 35, but over the age of 35 the husband tended to be older, the difference increasing with increasing age of husband from one year for the 35-39 age-group to eight years for the 70-74 age-group. For a given age of husband the age range of wives in Table XVII is less than that found in Table XIV and this appears to be at least partly due to the relatively few marriages with young partners, as would be expected from the nature of the group under consideration. It may be observed that the wives in Table XVII are younger than their husbands at all ages shown. Those marrying at 25-29 were on average more than eight years younger and even those marrying at 65-69 were on average a year younger than their husbands. Whereas the variation of age of wives tends to rise with advancing age of husband, there is a tendency at any rate for wives over 35, for the variation in husband's age to fall with advancing years and as the widowed element come to account for an increased proportion of this group.

A projection of future marriages

Tables XVIII and XIX represent work undertaken to give an idea of the likely trend in marriages among those elements of the population in which the Committee on Higher Education under Lord Robbins was most interested.

In producing these figures the aim was to retain comparability with the then current national projections prepared by the Government Actuary's Department in consultation with the General Register Office. The specific assumptions made are as follows.

It was assumed that marriage rates would continue at the 1959 level. This was justified on the grounds of the recent relative stability in marriage rates. An alternative calculation was made using marriage rates which increased in the immediate future by 2 per cent per year and then stabilised after five years. This made no significant difference to the picture shown in Table XVIII. It seemed to be unrealistic to assume a considerable rise in marriage rates in the near future but this can only be a subjective judgment. Use of the rates for men produced a number of bachelor marriages which was inconsistent (there were too few) with the future spinster marriages produced by the rates for women. The fluctuations in births immediately after the Second World War are likely to disturb marriage rates in a way which it is difficult to foresee. This is because a continually rising birth trend means that wives tend to come from slightly larger generations than their husbands. Application of the 1959 marriage rates (which derive from a population that does not have this feature) therefore produces fewer husbands than wives. The number of bachelor marriages was revised to be consistent with the spinster marriages. Some arbitrary adjustment was also made to the marriages which were produced by these marriage rates for the 1962-65 period to give a smoother run-in from the present number of marriages.

Table XVIII. Proportional age distribution of first marriages (actual or projected), selected years 1930 to 1960, single years 1962 to 1970, 1980 and 1990, England and Wales

(a) Men

Age at marriage	Year of marriage																	Age at marriage	
	1930	1935	1940	1945	1950	1955	1960	1962	1963	1964	1965	1966	1967	1968	1969	1970	1980		1990
	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1
16 ..	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
17 ..	4	3	4	8	7	12	16	20	20	19	24	21	4	17	17	16	19	4	17
18 ..	13	11	18	21	16	22	37	46	48	46	47	58	50	45	41	40	45	18	18
19 ..																		44	19
20 ..	28	25	46	46	39	52	72	72	78	82	79	77	96	83	75	71	77	74	20
21 ..	63	55	57	85	84	100	117	111	122	131	135	131	128	158	138	128	131	125	21
22 ..	80	72	71	95	101	111	124	123	115	125	133	136	131	128	162	142	133	131	22
23 ..	95	89	97	103	108	122	118	120	120	111	119	127	129	124	122	156	126	128	23
24 ..	105	100	106	105	100	110	104	106	104	102	94	100	107	109	106	105	106	111	24
Under 20 ..	18	15	23	31	25	37	59	72	74	72	77	85	74	67	63	61	69	67	Under 20
20-24 ..	371	341	377	435	432	495	535	532	539	551	560	571	591	602	603	602	573	569	20-24
25-29 ..	408	419	383	307	349	295	258	247	245	241	235	224	221	223	231	236	243	256	25-29
30-34 ..	119	146	132	120	105	97	79	78	74	69	65	61	58	55	54	54	71	65	30-34
35-39 ..	42	43	48	54	46	36	34	32	30	29	27	25	23	22	20	19	21	20	35-39
40-44 ..	19	17	18	27	21	19	15	17	17	17	15	14	13	12	11	10	8	10	40-44
45-49 ..	11	9	9	13	11	10	9	10	9	9	9	9	9	8	8	8	5	5	45-49
50 and over ..	12	10	10	13	11	11	11	12	12	12	12	11	11	11	10	10	10	8	50 and over
Total ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	Total
Number of first marriages .. (thousands)	290	324	442	368	319	314	306	296	295	301	307	318	325	330	328	322	331	350	Number of first marriages (thousands)
Average age ..	27.33	27.53	27.26	26.78	26.43	26.31	25.68	25.68	25.56	25.42	25.27	25.13	25.02	24.95	24.95	25.00	25.05	25.02	Average age

Table XVIII—continued

(b) Women

Age at marriage	Year of marriage																Age at marriage	
	1930	1935	1940	1945	1950	1955	1960	1962	1963	1964	1965	1966	1967	1968	1969	1970		1980	1990
16 ..	2	2	3	4	4	7	16	14	18	16	14	13	13	12	12	13	14	14
17 ..	11	9	13	18	19	28	43	42	42	54	47	42	39	37	37	38	42	43
18 ..	30	26	42	49	52	67	83	97	95	96	120	104	94	89	87	86	97	97
19 ..	51	49	83	84	92	110	122	136	143	141	139	175	152	139	134	132	142	142
20 ..	71	70	117	103	114	130	140	150	160	160	148	145	182	161	150	146	154	150
21 ..	104	105	102	124	139	145	151	144	151	158	157	151	150	190	171	161	160	156
22 ..	106	104	87	108	110	108	107	104	97	100	103	107	104	104	134	122	110	110
23 ..	103	101	90	98	90	86	77	77	71	64	66	72	75	73	75	98	77	79
24 ..	97	93	83	86	71	65	54	57	52	48	43	46	50	53	53	54	53	56
Under 20	94	86	141	155	167	212	264	288	298	306	319	334	298	277	270	269	295	296
20-24 ..	481	473	479	519	524	534	529	532	531	530	525	521	561	581	583	581	554	551
25-29 ..	284	295	241	183	187	149	117	100	97	94	90	85	84	88	93	99	100	106
30-34 ..	80	87	79	69	56	51	40	33	31	29	27	25	23	22	22	22	28	26
35-39 ..	30	30	32	35	29	21	20	15	14	13	11	10	10	9	9	8	8	8
40-44 ..	14	14	14	19	16	13	10	11	11	10	10	9	8	7	7	6	4	5
45-49 ..	8	7	7	10	10	9	8	6	6	5	5	5	5	5	5	4	2	2
50 and over ..	9	8	7	10	11	11	12	12	12	12	12	11	11	11	11	11	9	6
Total ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	Total
Number of first marriages .. (thousands)	298	333	450	369	315	319	309	300	303	304	313	321	328	332	329	324	332	352
Average age ..	25.50	25.59	24.97	24.63	24.01	23.91	23.26	23.04	22.85	22.69	22.55	22.46	22.45	22.49	22.56	22.61	22.37	22.32

Table XIX. Proportion (actual or projected) of women at stated ages per 1,000 at all ages who (a) marry for the first time and (b) are ever-married, selected years 1960 to 1990, England and Wales

(a) Proportion marrying					Age	(b) Proportion ever-married				
1960	1965	1970	1980	1990		1960	1965	1970	1980	1990
16	13	13	13	13	16	6	7	7	7	7
43	39	39	39	39	17	31	34	33	34	33
90	90	90	90	90	18	90	92	99	98	98
140	135	135	135	135	19	207	209	211	211	210
54	56	56	55	55	Under 20	61	81	88	87	86
153	145	145	145	145	20	342	351	351	350	350
158	152	152	152	152	21	483	501	501	498	499
112	105	107	107	107	22	609	636	631	628	628
82	74	77	76	76	23	696	734	715	719	720
59	51	55	55	55	24	761	803	785	785	785
113	108	106	108	107	20-24	579	595	597	590	595
26	20	21	21	21	25-29	851	887	880	882	877
8	6	5	5	5	30-34	905	925	940	935	936
4	2	2	2	2	35-39	908	929	944	952	953
2	2	1	1	1	40-44	907	921	940	961	959
1	1	1	1	—	45-49	891	916	929	955	964
—	—	—	—	—	50 and over	858	866	876	900	922

The migration assumption used was the same as that used in the national projection from 30th June 1961 which assumed net immigration of 140,000 in 1961-62, 90,000 in 1962-63 and 30,000 a year thereafter. In the absence of other information the migrants were assumed to have the same marital condition distribution as the remainder of the population. It may also be noted that the migration assumption is not very critical. A part of the basic calculations was made using the former migration assumption of no net migration and a separate calculation was made for the assumed migration. The effect was to add at most about 4,000 marriages a year.

The mortality assumption was that used for the national projection from 30th June 1961. It was further assumed that there was no marital condition differential in mortality. This last point is not wholly valid but its effect on the ages of most interest here is slight.

The fertility assumption was also that used for the national projection from 30th June 1961. Only the figures for 1980 and 1990 are affected by this assumption.

Table XVIII shows the proportional distribution by age of first marriages of men and women in selected years between 1930 and 1960 and which have been projected for individual years from 1962-1970 and also for 1980 and 1990. In the immediate future this projection shows an increase in the total number of marriages which seems likely to be concentrated at the younger ages with a corresponding reduction in the proportions marrying at the older ages. These changes are, however, likely to be small in magnitude when compared with the changes which have taken place in the age distribution of first marriages in the last thirty years. The variations in the proportions for individual years

which are shown in Table XVIII are largely a function of the changes in the annual number of births—thus the effect of the high births in 1947 can be clearly traced.

Table XIX has been produced for women only and shows the proportion of the total population at the stated age who marry for the first time in the given year and the proportion who in that year are ever-married (viz. married, widowed or divorced). The main feature shown by this table is that under the assumptions made, the changes over the next thirty years will be comparatively small. Needless to say the points made above with reference to Table XVIII apply equally to Table XIX.

The relation between marriage rates and population structure

A set of marriage rates can be summarised in the form of a nuptiality table in the same way as death rates may be presented in the form of a life table. This is a convenient way of demonstrating the implication of a set of marriage rates and the results can be combined with fertility rates or mean family sizes in the calculation of replacement rates.

Net nuptiality tables for males and females based on the marriage rates of 1951–55 were published in Appendix C of the 1956 Commentary. Since then marriage rates at the younger ages have risen and abridged nuptiality tables have been calculated to indicate the general effect of this rise. Table XX has been produced from the 1951–55 nuptiality tables and abridged nuptiality tables for 1961; it shows the proportions ever-married between the ages of 15 and 50 which would result if the marriage rates for these particular years were to continue indefinitely. Table XXI on the other hand shows the proportions ever-married at these ages for census years from 1881 to 1951 and also in the annual population estimates for 1941, 1946, 1956, 1960 and 1961.

On the basis of the 1961 abridged nuptiality table only 5·8 per cent of the men and 3·4 per cent of the women in the 45–49 age-group would remain unmarried. Comparison between Tables XX and XXI shows that at all but the youngest ages, the proportions ever-married implied by either the 1951–55 or the 1961

Table XX. Proportions ever-married, according to the net nuptiality of 1951–55 and 1961, England and Wales

(Per thousand)

Men		Age-group	Women	
Nuptiality of			Nuptiality of	
1951-55	1961		1951-55	1961
6	12	15-19	49	65
251	303	20-24	528	602
685	754	25-29	838	893
844	882	30-34	909	943
897	919	35-39	931	958
920	935	40-44	940	963
930	942	45-49	945	966

**Table XXI. Proportions ever-married among men and women, selected years
1881 to 1961, England and Wales**
(Per thousand)

Men aged							Year	Women aged						
15–	20–	25–	30–	35–	40–	45–49		15–	20–	25–	30–	35–	40–	45–49
5	223	609	769	848	878	901	1881	26	335	649	777	834	861	877
4	194	573	753	838	871	896	1891	20	299	606	754	823	850	871
3	174	548	748	824	861	886	1901	16	274	588	745	801	831	858
2	143	508	728	814	852	873	1911	12	243	566	730	790	820	835
4	178	554	769	837	863	876	1921	18	274	590	740	796	821	832
3	139	529	782	863	887	890	1931	18	258	594	751	794	819	832
9	203	617	803	864	888	906	1941	39	402	719	783	801	827	831
9	199	612	798	864	881	891	1946	35	442	713	829	832	836	840
5	229	647	810	867	892	902	1951	42	477	782	855	869	860	848
8	266	681	833	873	896	912	1956	55	539	820	883	889	893	869
9	301	714	844	882	895	917	1960	61	579	851	905	901	913	891
10	311	715	845	882	893	910	1961	65	591	857	909	911	912	896

marriage rates are higher than any that have been recorded in England and Wales. The proportion ever-married for the 45–49 age-group based on 1961 nuptiality exceeded the proportion in the estimated population at mid-1961 by 4 per cent for men and 8 per cent for women.

It should be remembered that nuptiality tables are based on a population with a particular sex and age structure. It is therefore possible for the male and female tables to be inconsistent in the sense that if the marriage rates on which they are based were to continue in effect indefinitely, they would produce more marriages of men under 50 than of women under 45 whereas in practice these two are usually about equal in number. The reason for this feature is that the sex and age structure of the present unmarried population still contains the balance of the former surplus of women which is now, however, becoming confined to the older ages where few marriages take place. In this way the abridged nuptiality table of 1961 implies 2 per cent more marriages of men under 50 than of women under 45 (the excess was 3 per cent in the 1960 abridged nuptiality table).

The probabilities of marriage on which the abridged nuptiality tables for a given year are based refer to the experience of different generations in a single calendar year. One effect of this is to make them of limited value as a guide to long-term prospects for which it is better to compare the experiences of different generations at the same ages rather than different generations in the same calendar period as is done in Table XXI.

Such proportions were published in Table XV of the 1959 Commentary for selected generations between 1862–66 and 1937–41. This illustrated the slow but steady rise in the proportion ever-married at 45–49 for both men and women. There has been a rise in the proportion ever-married at all age-groups for both men and women since the beginning of the century, although the women born in the later part of the nineteenth century experienced a slight fall in the proportion ever-married as compared with their predecessors. The proportion ever-married at ages 45–49 seems likely to rise, particularly for women. It seems that the proportions ever-married in actual generations of men and women will move towards those implied by the nuptiality tables unless any major disturbing factor arises.

Comparisons have been made above between the proportions of men and women in the same age-group. Allowance should, however, be made for the difference between the average age at marriage of men and women. To obtain a useful estimate of the relative numbers of men and women in the main marrying age-groups a rough allowance has been made for this difference by relating the average of the population of men at ages 15-44 and 20-44 last birthday (about $17\frac{1}{2}$ -45 in exact years) to the average of the population of women at ages 15-44 and 15-39 last birthday ($15-42\frac{1}{2}$ in exact years). The estimates so obtained are as follows:

	Census						Mid-1961 (estimate)	Nuptiality table 1951-55	Abridged nuptiality table 1961
	1871	1901	1911	1921	1931	1951			
All conditions	877	876	892	846	892	988	1,013	1,039	1,042
Unmarried ..	786	787	808	724	800	968	1,071	1,087	1,121

The last two columns are based on the average number of survivors in the nuptiality table for 1951-55 and the abridged nuptiality table for 1961 and it should be remembered that the ratios for the unmarried in these columns are affected by the inconsistency in the marriage rates of men and women already discussed. If the rates for women were to become consistent with those for men there would be fewer unmarried women left and the ratios would be slightly larger. The sequence of the figures shows that a combination of factors, including the slight increase in the proportion of male live births, the decrease in the predominantly male net emigration and the much smaller number of male war deaths in 1939-45 than in 1914-18, has been establishing a balance between the sexes in the corresponding marrying age-groups referred to above.

Total married women of reproductive age

The effect of high marriage rates in raising the proportion married is an important influence on the fertility of the community. Table XXII shows the proportions married in five-year age-groups under 50 for selected years since 1911 when the rise in the proportion married first became apparent. The proportions are also shown for the 15-49 aggregate age-group and also for the more critical 20-39 age-group within which 90 per cent of the births occur.

The proportion married increases with advancing age, at first rapidly and then more slowly, to a maximum close to age 35; as new marriages are increasingly offset by widowhood the proportion then declines slowly. The proportion married has generally increased within each age-group throughout the period shown in Table XXII.

The main feature of the figures for individual age-groups is the change which has taken place at the youngest ages; there has been a fourfold increase in the proportion married at ages 15-19, by far the larger part of this change having occurred since 1938. In general the picture is one of a slow rise up to the start of the Second World War and a much accelerated rise since then. The 15-49 age-group represents the fraction of the reproductive years which fall within married life. There was a slight increase in this fraction from 50 per cent to 53 per cent between 1911 and 1931 followed by a more rapid rise to

Table XXII. Married women per 1,000 total female population in each age-group and ratio of proportion to that of 1911 taken as 100, selected years 1911 to 1961, England and Wales

Year	Age-group							Aggregates	
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	20-39	15-49
Married women per 1,000 total female population									
1911	12	242	558	711	752	755	729	552	502
1931	18	257	587	733	755	749	733	572	529
1938	23	328	643	733	771	768	736	623	566
1946	35	436	696	800	797	784	762	686	626
1951	42	475	769	828	832	812	780	731	666
1956	55	537	812	866	857	845	804	775	697
1959	61	567	829	886	871	862	821	794	707
1960	61	577	843	892	874	868	827	800	710
1961	65	589	849	897	886	868	832	808	711
Ratio of proportion to that of 1911 taken as 100 (calculated before rounding off the proportions)									
1911	100	100	100	100	100	100	100	100	100
1931	151	106	105	103	100	99	101	104	105
1938	192	136	115	103	103	102	101	113	113
1946	294	180	125	113	106	104	105	124	125
1951	354	197	138	116	111	108	107	132	133
1956	459	222	145	122	114	112	110	140	139
1959	513	235	150	125	116	114	113	144	141
1960	513	239	151	126	116	115	113	145	141
1961	547	244	152	126	118	115	114	146	142

57 per cent in 1938 and 71 per cent in 1961. These increases are partly due to the ageing of the 15-49 age-group since 1911 which has increased the relative number at the older ages in this age-group where the proportion married is greater. This element can be removed by calculating the number of women who would have been married if the age-group proportions married had been those of 1911; the actual number of married women can then be divided by the standardised number to produce a set of marriage indices standardised on the 1911 proportions married. These indices are compared with the unstandardised figures derived from Table XXII in the following statement:

Year	1911	1921	1931	1941	1951	1956	1959	1960	1961
Standardised	1·000	1·008	1·022	1·125	1·200	1·257	1·291	1·304	1·316
Unstandardised	1·000	1·025	1·054	1·201	1·327	1·388	1·408	1·413	1·416

The above figures show that the true increase in the proportion married among women aged 15-49 was 32 per cent compared with the 42 per cent suggested by the unstandardised proportions. A little less than a third of the latter increase is due to the ageing of the population and is unrelated to the changing incidence of marriage.

Seasonal incidence of marriage

The numbers of marriages and rates per 1,000 population by calendar quarter are shown in serial form in Table D of Part II and monthly numbers of marriages since 1947 are shown in Table N with ratios of the daily average for each month to that of the calendar year.

The proportions of the marriages of each year which took place in each quarter for years since the 1841-50 period are shown in Table XXIII.

**Table XXIII. Quarterly incidence of marriage, 1841 to 1961,
England and Wales**

Period	Proportion of marriages in quarter ended			
	March	June	September	December
1841-1850.. ..	205	255	239	301
1851-1860.. ..	206	252	242	300
1861-1870.. ..	205	252	246	297
1871-1880.. ..	204	253	245	298
1881-1890.. ..	197	257	250	296
1891-1900.. ..	184	265	266	285
1901-1910.. ..	182	265	280	273
1911-1920.. ..	186	263	280	271
1921-1930.. ..	170	266	303	261
1931-1935.. ..	162	260	317	261
1936-1940.. ..	166	253	321	260
1941-1945.. ..	212	268	276	244
1946-1950.. ..	218	250	303	229
1951-1955.. ..	289	206	303	202
1956-1960.. ..	296	196	300	208
1958	302	195	299	204
1959	298	186	302	214
1960	259	212	301	228
1961	243	220	324	213

In 1961 the September quarter accounted for 32 per cent of the year's marriages, the March quarter for 24 per cent, the June quarter for 22 per cent and the December quarter for 21 per cent. Table XXIII illustrates the change which has taken place during the last hundred years. In the 1851-60 period the December quarter accounted for 30 per cent of all marriages, the June and September quarters for about a quarter each and the March quarter had the smallest share with 21 per cent. The period up to the outbreak of the Second World War saw a steady rise in the proportion of marriages in the September quarter, while the share of the December and March quarters fell. The effect of these changes was such that in the 1936-40 period the share of the September quarter had risen to 32 per cent of the total and the proportion in the March and December quarters had fallen to 17 and 26 per cent respectively; during this period the share of the June quarter rose very slowly. The years since 1940 have been marked by the rapid rise in the proportion of marriages in the March quarter. This rise has had the effect of reducing the proportions in all the other quarters, but particularly in the June and December quarters.

Table XXIV. Monthly incidence of marriage, 1947 to 1961, England and Wales

Period	January	February	March	April	May	June	July	August	September	October	November	December	Total for period
Numbers of marriages													
1947-1950	79,800	86,917	172,641	137,984	88,828	151,447	162,258	146,750	162,808	105,026	82,372	154,801	1,531,632
1951-1955	77,794	106,484	322,146	127,251	85,085	149,785	173,716	172,504	185,313	114,109	81,472	158,920	1,754,579
1956-1960	71,511	100,764	337,942	111,513	75,702	149,797	147,023	174,825	196,561	136,132	84,203	137,527	1,723,500
1956	13,651	19,898	73,573*	21,113	15,529	32,179*	30,144	34,503	42,276*	21,158	15,947	32,973*	352,944
1957	13,894	19,954	76,244*	19,034	12,150	34,620*	28,458	38,192*	36,967	21,817	18,199*	27,374	346,903
1958	12,940	20,777	68,912*	21,229	17,434*	27,548	27,900	37,115*	36,683	24,005	19,048*	26,322	339,913
1959	15,430*	18,972	67,028	20,121	17,142*	26,018	27,390	35,601*	39,600	32,649*	15,548	24,627	340,126
1960	15,596*	21,163	52,185	30,016*	13,447	29,432	33,131*	29,414	41,035	36,503*	15,461	26,231*	343,614
1961	12,310	18,020	54,118	32,733*	16,623	26,813	31,282*	30,822	50,263*	31,897	15,899	25,898*	346,678
Ratio of daily average for the month to daily average for the year taken as 1,000													
1947-1950	614	734	1,328	1,097	683	1,204	1,248	1,129	1,294	808	655	1,191	1,000
1951-1955	522	786	2,163	883	571	1,039	1,166	1,158	1,286	766	565	1,067	1,000
1956-1960	489	753	2,310	789	518	1,058	1,005	1,196	1,389	933	595	940	1,000
1956	456	712	2,462*	730	520	1,113*	1,008	1,155	1,462*	709	552	1,104*	1,000
1957	472	750	2,588*	668	412	1,214*	966	1,296*	1,297	741	638*	929	1,000
1958	448	797	2,387*	760	604*	986	966	1,286*	1,313	832	682*	912	1,000
1959	534*	727	2,320	720	593*	931	948	1,232*	1,416	1,130*	556	852	1,000
1960	536*	777	1,793	1,066*	462	1,045	1,138*	1,011	1,457	1,254*	549	901*	1,000
1961	418	678	1,838	1,149*	565	941	1,062*	1,047	1,764*	1,083	558	880*	1,000

* These months contained five Saturdays.

Table XXIV is an extract from Table N in Part II for recent years showing the number of marriages in each month and also the ratios of the daily averages for each month to the daily average for the year. The true monthly pattern appears to be disturbed by the effect of the distribution of marriages over the days of the week; the popularity of Saturday marriages means that figures for the same month differ from year to year according to the number of Saturdays in the month. Those months with five Saturdays are marked in Table XXIV. When some allowance is made for the number of Saturday the daily incidence of marriage appears to have two peaks during the year. The highest is the rather isolated peak in March and the other is the peak in September which is approached by increasing daily averages from June onwards. The main influence leading to the peak in March (which occurs irrespective of the date of Easter) appears to be the end of the income tax year on 5th April. This seems to cause some marriages to be brought forward into the earlier tax year to take advantage of the additional tax relief. A feature which has been noticeable recently is the rise in the proportion of October weddings; the 1961 daily ratio for October represents a 30 per cent increase over 1958 when October last contained four Saturdays. This change is also likely to be linked with the effect of the tax laws.

Marriage incidence in different parts of the country

The numbers of marriages in regions, conurbations, counties and county and metropolitan boroughs are shown in Table F of Part II, and the number of persons marrying in each region and conurbation by age and previous marital condition in Table M. These figures have to be used with caution because the district where the marriage takes place may contain the residence of only one of the parties and sometimes of neither. This factor distorts differences between marriage rates for local areas, though less so in comparisons between areas as large as regions and conurbations. Marriage rates in regions and conurbations were published in the 1960 Commentary volume and a discussion of their main features appeared on pages 29–31 of that volume.

DIVORCES

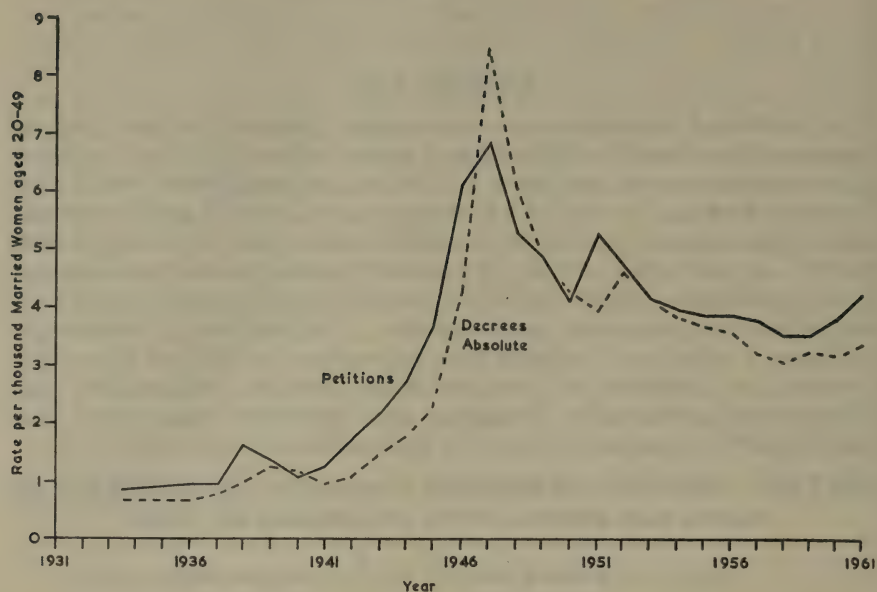
The numbers of dissolutions and annulments of marriage, petitions filed and decrees absolute granted, in 1961 and past years are shown in Table O in Part II and the dissolutions and annulments of 1961 are analysed further in the P series of tables in Part II. For 1961 the Supplements to Tables P3 and P6, showing a cross classification by year of marriage also appear; they were last published for 1957. In 1961 there were 31,124 petitions for dissolution of marriage and 781 for annulment; 24,936 decrees for dissolution of marriage and 458 for annulment of marriage were made absolute. The number of petitions for dissolution is higher by 12 per cent than the number for 1960 and the number of decrees for dissolution is 7 per cent higher than the 1960 number. The 25,394 decrees absolute for dissolution and annulment which were made absolute in 1961 represent a rate of 2·1 per 1,000 married couples.

Table XXV. Dissolutions and annulments of marriage: new petitions filed and decrees made absolute, 1931 to 1961, England and Wales

Year	Petitions filed		Decrees absolute granted	
	Number	Per 1,000 married women aged 20-49	Number	Per 1,000 married women aged 20-49
1931-35*	4,784	0·80	4,011	0·67
1936	5,749	0·92	4,057	0·65
1937	5,903	0·93	4,886	0·77
1938	10,233	1·59	6,250	0·97
1939	8,703	1·33	7,955	1·22
1940	7,086	1·05	7,755	1·15
1941	8,305	1·21	6,368	0·93
1942	12,003	1·72	7,618	1·09
1943	15,385	2·19	10,012	1·43
1944	18,969	2·70	12,312	1·75
1945	25,711	3·65	15,634	2·22
1946	43,163	6·09	29,829	4·21
1947	48,501	6·81	60,254	8·47
1948	37,919	5·28	43,698	6·08
1949	35,191	4·87	34,856	4·82
1950	29,729	4·09	30,870	4·24
1951	38,382	5·23	28,767	3·92
1952	34,567	4·69	33,922	4·60
1953	30,542	4·14	30,326	4·11
1954	29,036	3·93	28,027	3·79
1955	28,314	3·83	26,816	3·62
1956	28,426	3·83	26,265	3·54
1957	27,858	3·74	23,785	3·19
1958	26,239	3·52	22,654	3·04
1959	26,327	3·52	24,286	3·25
1960	28,542	3·80	23,868	3·18
1961	31,905	4·25	25,394	3·38

* Annual average.

Diagram 2



Dissolutions and annulments of marriage: new petitions filed and decrees made absolute per 1,000 married women aged 20-49, 1931 to 1961, England and Wales

Table XXV summarises the figures of Table O for the last three decades. It relates the number of petitions filed and decrees made absolute to the number of married women aged 20-49. The use of this age range, which has recently accounted for 85 to 90 per cent of all divorces, as a denominator in place of the total number of all married couples, affords a rough measure of standardisation. The rates from Table XXV are shown in Diagram 2.

The Matrimonial Causes Act of 1857 first made civil divorce available without a private Act of Parliament, but the rise in the number of divorces was not disproportionate to the increase in the population until the First World War after which there was a slow rise in the incidence of divorce until the extension of the permissible grounds for divorce under the Matrimonial Causes Act of 1937. The effect of this Act is shown by the rise in the rate of petitioning in 1938 and in decrees absolute granted in 1939 and 1940. The Second World War produced a sharp and sustained rise in the incidence of divorce from 1942 until 1947. The decline from the peak of 1947 appears to have been partly checked by the enactment of the Legal Aid and Advice Act of 1949 which increased the financial assistance to litigants; the effect of this Act appears in the rise in petitions in 1951 and in decrees absolute granted in 1952. The disturbance occasioned by this Act seems to have worked itself out by 1954 and for the next few years the rate for decrees absolute granted tended to fall slowly. The rise in the number of decrees absolute granted in 1959 may be partly due to the operation of the Matrimonial Causes (Decree Absolute) General Order 1957 which applied to petitions filed on or after 30th April 1957 and which increased the normal interval between the granting of a decree *nisi* and the making of it absolute from six weeks to three months.

The number of petitions and dissolutions rose in 1960 and this rise continued in 1961. The 1961 figure for decrees absolute granted reflects the earlier rise in petitioning which may be linked with a change in the income limits for legal aid which became effective from 1st April 1960 under the terms of the Legal Aid Act (1960). In the past the incidence of divorce appears to have been sensitive to changes in the provision of financial assistance to litigants.

Over the period between 1954 and 1961 it appears that nine out of ten of the petitions filed for dissolution of marriage resulted in a decree absolute being granted and seven out of every ten petitions for the annulment of marriage resulted in the granting of a decree absolute.

Parties to whom and grounds on which decrees granted

Table P1 in Part II shows figures of the decrees made absolute in 1961 classified by the party to whom the decree was granted and the grounds on which it was granted.

Among the 25,394 decrees absolute granted in 1961, 24,936 were decrees for dissolution of marriage of which 45 per cent were granted to the husband, and the remaining 458 were for annulment of marriage of which 52 per cent were granted to the husband. There were 74 cases where the decree of dissolution was granted to both parties.

Table XXVI shows for 1961 the distribution of grounds on which decrees absolute were granted according to the party to whom the decree absolute was granted. The entries in this table amount to more than the total number of decrees because decrees were sometimes granted on more than one ground and sometimes to both parties. Section (ii) shows the distribution of each ground by the party to whom the decree was granted and Section (iii) shows the proportion of the decrees granted to each party in which each ground was mentioned (either alone or with one or more other grounds).

Table XXVI. Grounds on which decrees absolute of dissolution were granted by party, 1961, England and Wales

Party to whom decree absolute of dissolution granted	Ground						
	Adultery	Desertion	Cruelty	Unsound mind	Presumed dead	Others	Total
(i) Numbers							
Husband ..	6,957	4,373	231	88	14	—	11,663
Wife ..	6,294	4,650	3,756	46	34	29	14,809
(ii) Distribution per 1,000 of each ground, by party							
Husband ..	525	485	58	657	292	—	441
Wife ..	475	515	942	343	708	1,000	559
(iii) Distribution per 1,000 total grounds for each party, by ground							
Husband ..	596	375	20	8	1	—	1,000
Wife ..	425	314	254	3	2	2	1,000

The distribution by party by ground for 1961 was similar to that for 1960. Adultery was the most frequent ground, accounting for 60 per cent of all grounds mentioned where the decree was granted to the husband and 43 per cent of all grounds where the decree was granted to the wife. Among decrees

in which adultery was mentioned as a ground, 53 per cent were granted to the husband. Desertion is the second most frequent ground; 52 per cent of the decrees where desertion was a ground were granted to the wife. Cruelty is the third common ground, occurring mainly in decrees granted to the wife (94 per cent of decrees where cruelty was mentioned in 1961 were granted to the wife). These three main grounds accounted for 99 per cent of all the grounds mentioned in decrees absolute granted in 1961.

Present ages of parties

Dissolutions and annulments by age of husband and wife at the date of the decree absolute are shown in Table P2 of Part II with rates per 1,000 married men or women in that age-group. These rates for 1961 are reproduced in Table XXVII with comparable figures for years since 1950.

Table XXVII. Divorce rates per 1,000 married population by age at divorce, 1950 to 1961, England and Wales

Year	Age at date of decree absolute								
	All ages	Under 25	25–	30–	35–	40–	45–	50–	60 and over
Husbands									
1950–54 ..	2.7	2.1	5.0	5.0	4.3	3.4	2.5	1.4	0.3
1955	2.4	2.0	4.2	4.4	3.7	3.0	2.3	1.3	0.3
1956	2.3	1.9	4.1	4.2	3.5	3.0	2.3	1.3	0.3
1957	2.1	1.1	3.6	3.7	3.3	2.6	2.2	1.3	0.3
1958	1.9	1.0	3.3	3.5	3.1	2.6	2.0	1.2	0.3
1959	2.1	1.1	3.6	3.9	3.2	2.9	2.1	1.3	0.3
1960	2.0	1.0	3.6	3.8	3.2	2.7	2.0	1.2	0.3
1961	2.1	1.4	3.9	4.1	3.4	2.8	2.1	1.3	0.3
Wives									
1950–54 ..	2.7	3.1	5.6	4.8	3.8	2.9	2.1	1.0	0.2
1955	2.3	3.0	4.6	4.2	3.2	2.6	2.0	0.9	0.2
1956	2.3	2.9	4.6	4.0	3.2	2.6	1.9	0.9	0.2
1957	2.0	2.0	4.1	3.6	2.9	2.3	1.8	0.9	0.2
1958	1.9	2.0	3.8	3.3	2.8	2.3	1.7	0.9	0.2
1959	2.1	2.1	4.1	3.7	2.9	2.5	1.8	1.0	0.2
1960	2.0	2.2	4.2	3.5	2.9	2.2	1.7	0.9	0.2
1961	2.1	2.4	4.5	3.8	3.0	2.4	1.8	1.0	0.2

The slightly younger age distribution of wives compared with husbands at the time of the divorce is reflected in the age rates shown in Table XXVII. This feature derives from the younger marriage age distribution of wives. In 1961 the 25–40 age-group accounted for 54 per cent of the husbands who became divorced and 57 per cent of the wives.

In comparing divorce rates by age since 1950 it appears that the fluctuations have been greater at the younger ages for both husbands and wives. The slight rise in the divorce rate since 1959 has affected all current age groups: this would be expected if the rise were due to a general factor such as increased financial assistance to litigants.

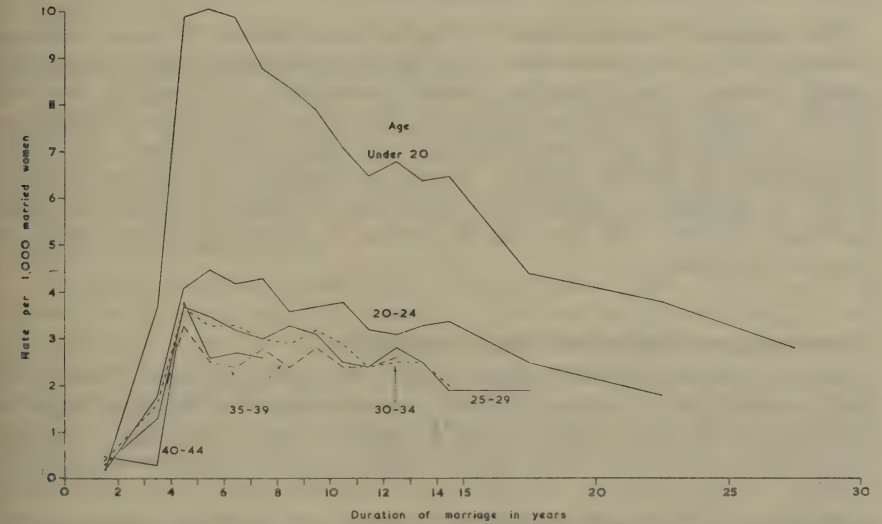
Duration of marriage and marriage age of wife

Table P4 in Part II shows the number of decrees absolute granted during 1961, classified by duration of marriage and the marriage age of the wife. Divorce rates per thousand married women are also shown where the wife was under the age of 50 at the date of the decree, these being the only ages where estimates of the numbers of married women are available. An extract from the rates section of Table P4 is reproduced in Table XXVIII. Diagram 3 illustrates rates similar to these in Table XXVIII for 1961.

Table XXVIII. Dissolutions and annulments of marriage made absolute, by duration of marriage and marriage age of wife. Rates per 1,000 married women, 1961, England and Wales

Age of wife at marriage	Duration of marriage (completed years)															
	0-2	3	4	5	6	7	8	9	10	11	12	13	14	15-19	20-24	25-29
Under 20	0.2	3.7	9.9	10.1	9.9	8.8	8.4	7.9	7.1	6.5	6.8	6.4	6.5	4.4	3.8	2.8
20-24	0.2	1.8	4.1	4.5	4.2	4.3	3.6	3.7	3.8	3.2	3.1	3.3	3.4	2.5	1.8	
25-29	0.3	1.3	3.7	3.5	3.2	3.0	3.3	3.1	2.5	2.4	2.8	2.5	1.9	1.9		
30-34	0.4	1.6	3.7	3.3	3.3	3.0	2.9	3.2	2.9	2.4	2.5	2.5	2.0			
35-39	0.3	1.3	3.3	2.5	2.4	2.8	2.4	2.8	2.4	2.4						
40-44	0.5	0.3	3.8	2.6	2.7											

Diagram 3



Rates of dissolution and annulment of marriage by duration of marriage and marriage age of wife, 1961, England and Wales

In general, age at marriage exerts a greater influence on divorce rates than does current age. The rates in Table XXVIII show a regular progression; they fall with increasing age at marriage and also, after three years, with increasing duration of marriage (normally a petition for divorce may not be filed within three years of the date of the marriage). Divorce rates tend to be highest when the marriage has been in existence between four and eleven years,

and then to decline steadily with increasing marriage duration. Diagram 3 illustrates the effect of age at marriage. The increased risk of divorce in those marriages where the wife was under the age of 20 at marriage is clear. Less marked but still distinct is the differential between marriages where the wife was aged 20–24 at marriage and those where the wife was over the age of 25 at the time of the marriage. Above the age of 25 it appears that age at marriage has relatively little effect on the frequency of divorce, at least for the first ten or twelve years of the marriage.

The following statement shows the number of marriages which would, at certain durations, have been dissolved out of a thousand marriages contracted if the age at marriage rates in Table P4 for 1961 were to be maintained indefinitely, ignoring the effect of mortality:

Age of wife at marriage	Duration in years			
	5	10	15	20
Under 20	14	58	89	109
20–24	7	27	43	55
25–29	6	22	33	43
30–34	7	22	34	—
35–39	6	18	—	—

This statement illustrates again the higher risk of divorce of those marriages where the wife was aged less than 20 at the time of the marriage. It should be noted, however, that to combine current probabilities of divorce in this way is not a reliable guide to the future long-term prospects. These probabilities are analogous to life table probabilities in referring to the experience in a single calendar year of different cohorts. When sufficient data has been accumulated it will be possible to compare the experience of different cohorts at equal marriage durations and this should produce a more satisfactory guide to long-term prospects.

Marriage ages of husband and wife in combination

Marriages dissolved and annulled during 1961 are classified in Table P3 by the marriage ages of husband and wife in combination and the Supplement to Table P3 divides these decrees further by calendar year of marriage. Approximate rates are shown in Table XXIX; these rates are based on the original number of marriages and are therefore lower than rates based on the true population (i.e. the number of women [or men] still married), the more so the longer the marriage duration. They will fall short of the latter rates by the proportion of the original marriages which are no longer in existence. The excess of the population will be larger for older marriage ages and for previously divorced wives. Conversely, for those groups where the 1961 population of women married once only exceeds the original spinster marriages (due to inward migration), the rates based on original marriages will be too high. For previously single wives married at ages under 35 since 1935 the percentage excess of the 1961 population (and hence the percentage deficiency of the rates) is shown in the following statement:

Calendar year of marriage	Age at marriage			
	Under 20	20-24	25-29	30-34
1955-57	-1.9	-0.1	-0.1	0.3
1950-54	2.2	3.4	3.4	4.6
1945-49	14.0	9.2	8.4	10.7
1940-44	26.6	22.6	18.1	not available
1935-39	27.7	24.2	not available	

This statement clearly shows the difference made by marriage duration (and by the war) and also that made by age; as marriage age rises, most of the ratios at first decline as a result of falling divorce incidence, but increase again after age 30 as a result of rising mortality and widowhood.

Table XXIX shows that the younger the marriage age, the higher were the divorce rates. This was true for husbands and wives separately and also, generally, for the age of one within a given age-group of the other. The other noticeable feature is that within the pattern of high rates accompanying young marriage ages, the likelihood of divorce tends to be lower when the age at marriage group of husband and wife are the same and to increase on either side of this point, rising higher at the younger age-group of the other party. The small numbers involved may be the cause of the apparent exceptions to these features.

Previous marital condition by marriage age

In Table P6 in Part II the decrees absolute are analysed by the marital condition of both parties before the marriage, within age-groups of wife at marriage. The Supplement to Table P6 gives an analysis by marriage age and year for each previous marital condition separately for husbands and wives. From this Supplement the rates in Table XXX, which are based on original marriages, have been derived.

The rates for individual age at marriage groups in Table XXX tend to be lowest for first marriages and highest for persons previously divorced, with the previously widowed in an intermediate position. For husbands the rates for the widowed are nearer to those of the previously single than to the previously divorced but this feature is less well marked for wives. For all marriage ages combined the rates of the previously widowed are much the lowest in both sexes but this effect is due to the different marriage age distributions of the three groups.

As the rates are based on the original marriages and not on the appropriate population the true differentials will be slightly larger in the same direction. The greater divorce risk of those previously divorced, for example, means that relatively fewer of their original marriages have survived to 1961 from a given marriage year than among the corresponding group of first marriages. Hence for those formerly divorced the excess of the rates per 1,000 married women over the rates per 1,000 original marriages will be greater than in the corresponding group of first marriages. In the same way, the differences between the rates for various marriage cohorts reflect partly the influence of marriage duration and partly the difference between the two types of rate.

Table XXIX. Divorce rates per 1,000 related marriages by calendar year of marriage and the ages at marriage of both parties in combination, 1961, England and Wales

Age of wife at marriage	Age of husband at marriage					
	All ages	Under 20	20–	25–	30–	35 and over
Persons married in the years 1955–57						
All ages ..	4·7	12·1	5·6	3·8	3·4	2·7
Under 20 ..	9·2	13·4	8·7	7·7	8·4	6·9
20–	4·0	8·3	4·1	3·4	4·0	6·1
25–	3·3	9·2	4·6	2·8	2·8	3·7
30–	3·3	44·4	7·7	4·0	2·1	3·3
35 and over	2·2	—	8·4	3·5	3·6	2·0
Persons married in the years 1950–54						
All ages ..	3·9	10·8	4·9	3·4	3·0	1·9
Under 20 ..	8·0	11·5	7·7	7·2	8·1	8·8
20–	3·7	9·2	3·8	3·3	3·5	3·9
25–	2·8	8·8	3·8	2·6	2·2	2·7
30–	2·9	18·2	6·7	3·1	2·6	2·5
35 and over	1·6	—	10·1	3·1	3·0	1·3
Persons married in the years 1945–49						
All ages ..	2·7	5·8	3·6	2·5	2·2	1·3
Under 20 ..	5·4	6·0	5·4	4·9	6·5	6·3
20–	2·8	5·5	3·0	2·4	2·3	3·6
25–	2·1	3·5	2·9	1·9	1·9	1·9
30–	1·9	—	4·2	2·1	1·8	1·5
35 and over	0·9	—	5·2	3·9	1·7	0·7
Persons married in the years 1940–44						
All ages ..	1·8	3·6	2·3	1·6	1·3	0·6
Under 20 ..	3·1	3·5	3·0	3·2	3·9	3·1
20–	1·9	3·6	2·0	1·7	1·6	2·0
25–	1·3	4·1	2·3	1·1	1·0	1·2
30–	1·1	7·9	2·7	1·3	1·0	0·8
35 and over	0·3	—	1·5	1·8	0·6	0·3
Persons married in the years 1935–39						
All ages ..	1·2	3·1	1·8	1·1	0·8	0·3
Under 20 ..	2·8	3·1	2·9	2·7	1·5	1·3
20–	1·4	3·1	1·5	1·2	1·6	1·6
25–	0·8	5·8	1·4	0·8	0·7	0·7
30–	0·5	—	1·9	0·6	0·4	0·2
35 and over	0·1	—	0·8	0·6	0·3	0·1

Table XXX. Divorce rates per 1,000 related marriages, by husband's or wife's age at and marital condition before the marriage and calendar year of marriage, 1961, England and Wales

Calendar year of marriage	Previous marital condition	Age at marriage					
		All ages	Under 20	20–	25–	30–	35 and over
Husbands							
1955–57 ..	{ Single	4·8	12·1	5·5	3·6	3·0	2·5
	{ Widowed	2·2	—	21·0	8·8	4·8	1·9
	{ Divorced	5·6	—	15·6	11·3	5·8	4·2
1950–54 ..	{ Single	4·1	10·8	4·9	3·3	2·5	1·8
	{ Widowed	1·4	—	7·6	4·0	3·7	1·2
	{ Divorced	4·3	—	8·7	7·2	5·6	3·1
1945–49 ..	{ Single	2·9	5·8	3·6	2·4	1·9	1·2
	{ Widowed	0·9	—	4·7	1·6	2·6	0·7
	{ Divorced	3·1	—	4·0	4·3	3·8	2·6
1940–44 ..	{ Single	1·9	3·6	2·3	1·6	1·2	0·7
	{ Widowed	0·5	—	4·0	1·9	2·0	0·3
	{ Divorced	2·2	—	—	4·0	2·9	1·8
1935–39 ..	{ Single	1·3	3·1	1·8	1·1	0·8	0·4
	{ Widowed	0·2	—	2·9	1·1	0·6	0·1
	{ Divorced	1·6	—	—	3·2	2·7	1·0
Before 1935	{ Single	0·8	2·3	1·2	0·6	0·3	0·1
	{ Widowed	0·1	—	2·8	0·8	0·3	0·1
	{ Divorced	0·4	—	7·9	0·5	0·7	0·1
Wives							
1955–57 ..	{ Single	4·7	9·2	3·9	2·9	2·4	1·1
	{ Widowed	2·4	—	9·9	4·3	4·4	2·1
	{ Divorced	5·9	—	12·5	7·9	5·9	4·4
1950–54 ..	{ Single	4·0	8·0	3·7	2·4	2·3	0·9
	{ Widowed	1·8	—	1·5	4·0	2·5	1·5
	{ Divorced	4·7	—	9·9	6·5	4·9	3·1
1945–49 ..	{ Single	2·8	5·4	2·8	1·8	1·2	0·7
	{ Widowed	1·3	7·5	1·8	2·7	1·9	0·8
	{ Divorced	3·8	16·7	6·4	4·5	4·7	2·1
1940–44 ..	{ Single	1·8	3·1	1·9	1·3	0·9	0·3
	{ Widowed	0·7	—	4·5	1·9	1·5	0·3
	{ Divorced	2·6	—	15·0	4·7	3·1	1·0
1935–39 ..	{ Single	1·2	2·9	1·4	0·8	0·5	0·1
	{ Widowed	0·3	—	4·8	0·9	0·4	0·1
	{ Divorced	1·7	—	2·0	5·0	1·4	0·6
Before 1935	{ Single	0·8	1·9	0·9	0·4	0·2	0·0
	{ Widowed	0·0	45·5	1·6	0·6	0·3	0·0
	{ Divorced	1·0	—	3·1	1·2	1·1	0·0

Children of the marriage

Table P5 in Part II shows the dissolutions and annulments of marriage during 1961 classified by the number of surviving children of the marriage. These are the children alive at the date of the petition irrespective of their age and, as well as children of the dissolved marriage, may also include children legitimated by that marriage and any adopted children.

The total number of children involved in the 25,394 dissolutions and annulments in 1961 was 34,820, an average of 1.4 children per couple. The average number of children per divorced couple fell steadily from 1.6 for those where the wife was aged under 20 at marriage to 0.9 for those where the wife was aged 35-39 at marriage and 0.4 where the wife was aged 45 or over at marriage.

Among all marriages dissolved during 1961, 32 per cent were childless, 30 per cent had one child, 31 per cent had two or three children and 7 per cent had four or more children. The proportion of childless marriages rises from just over a fifth where the wife was aged under 20 at marriage to over three-fifths where the wife was 35 or over at the time of the marriage. The proportion of childless married women under 50 enumerated in the 1951 Census was 12 per cent in the under 20 age-at-marriage group, rising to 51 per cent for those married at age 35 and over. Allowing for the differences in the two sets of data, this suggests that the incidence of divorce for childless couples may be about twice as high as the average for the marriage age-group concerned.

WIDOWHOOD

Table SS of Part II shows the number of marriages ended by the death of one partner, classified by the ages of the deceased and surviving partners. This table, however, is deficient in respect of those deceased persons about whose marital condition no statement was supplied when the death was registered. The incidence of this occurrence as a percentage of all deaths in 1961, as well as in the two previous years, is set out below for men and women separately.

Table XXXI. Percentage of deaths with marital condition not stated, 1959 to 1961, England and Wales

Men			Age at death	Women		
1959	1960	1961		1959	1960	1961
3.5	3.4	1.2	15 and over	0.053	0.058	0.11
10.2	11.8	5.5	15-	0.75	0.74	0.48
34.1	36.7	7.1	20-	1.07	0.93	1.2
25.0	27.8	5.4	25-	0.43	0.70	0.25
19.7	19.7	3.4	30-	0.072	0.16	0.15
13.0	13.5	2.7	35-	0.24	0.18	—
9.4	10.1	2.3	40-	0.12	0.19	0.088
6.9	6.5	1.8	45-	0.088	0.10	0.19
4.9	4.8	1.4	50-	0.092	0.046	0.19
3.7	3.8	1.0	55-	0.048	0.12	0.14
3.1	3.1	1.2	60-	0.050	0.055	0.14
2.7	2.4	1.1	65-	0.058	0.070	0.16
2.5	2.1	1.1	70-	0.060	0.037	0.14
2.3	2.1	1.1	75 and over	0.034	0.041	0.086

The “not stated” percentage of female deaths has increased but is very small. In each age-group it is minute compared with the corresponding percentage of male deaths. The marital condition of deceased females could always be inferred from the former Rank or Profession (now Occupation) column of the death registers. For male deaths the “not stated” percentage has also been persistent up to 1960 though there has been a slow uneven decline from a level of 5 per cent in 1949, but, unlike the proportion for women, it is appreciable in every age-group which could include married men and is substantial at younger ages. The marital condition of deceased persons is normally obtained under the Population (Statistics) Act, 1938, as amended by the Population (Statistics) Act, 1960; but this Act does not apply in the case of deaths registered on a coroner’s certificate after an inquest. This accounts for the general scale of omission of marital condition for males experienced hitherto. Since the beginning of 1961, however, coroners have been asked to supply this information when it is available to them and this has led to a sharp reduction in the proportion of male deaths without statement of marital condition.

The average proportion in 1961 is only about one third of that for 1960 and for the younger age-groups the fraction is very much smaller. At ages 20–39 there has been a four fifths reduction.

The necessity for a rateable distribution of the "not stated" means there must be some slight reservations about the numerators of the widowhood rates, which measure the number of married women (men) whose husbands (wives) died in the current year per 1,000 married women (men) in the specified age-group. It may lead to some bias in that such persons are likely to be single and to be concentrated in the younger ages; but the amount of such a bias will be small, particularly in relation to the "not stated" elements consequent on registration on a coroner's certificate. It is possible that the widowhood rates for women in Table XXXII below are slightly over estimated through such bias.

Table XXXII. Widowhood rates, 1957 to 1961, England and Wales

1957	1958	1959	1960	1961	Age of sur- viving spouse	1957	1958	1959	1960	1961
Deaths of wives per 1,000 married men						Deaths of husbands per 1,000 married women				
6·8	6·7	6·7	6·2	6·8	15 and over	14·0	14·1	14·0	12·9	14·2
0·4	0·4	0·4	0·3	0·4	15-	0·9	0·8	0·8	0·6	0·7
0·6	0·6	0·6	0·5	0·5	25-	1·1	1·0	1·0	0·8	1·0
0·8	0·7	0·7	0·6	0·6	30-	1·5	1·5	1·5	1·3	1·4
1·3	1·2	1·1	1·2	1·1	35-	2·6	2·6	2·6	2·4	2·5
1·9	1·8	1·7	1·7	1·7	40-	4·6	4·6	4·5	4·2	4·3
2·9	2·8	2·7	2·7	2·8	45-	7·9	7·7	7·7	7·2	7·6
4·6	4·4	4·3	4·3	4·3	50-	13·2	13·0	13·0	12·3	12·7
7·5	7·1	7·2	6·8	7·0	55-	21·9	21·5	21·4	19·8	20·7
11·5	11·4	11·2	11·2	11·3	60-	33·0	33·1	32·3	31·4	33·1
18·3	18·3	18·2	17·6	18·0	65-	49·9	49·9	49·0	47·7	50·1
29·4	29·4	28·7	28·1	28·7	70-	69·8	72·0	70·9	66·7	69·7
56·0	57·3	56·5	56·4	60·0	75 and over	105·9	110·7	109·0	106·1	111·9

At this distance from the 1951 Census there may also be some distortion in the estimated number and age distribution of married men and women in the population. The preliminary results of the 1961 Census reveal that the net addition to the population over the decade since the previous Census by inward and outward migration has been correctly estimated for persons of all ages and marital conditions; but this does not mean that the number, sex, age and marital condition of the two gross "ins" and "outs" figures of which this is the difference are necessarily confirmed. Only the final results of the 1961 Census, as yet unavailable, can reveal any change (other than the natural change) in the sex and marital condition structure of the population which may not have been correctly estimated. But such errors are unlikely to affect the broad conclusions to be drawn from the data available. The chance that a married woman aged 25 will be a widow by 45 is still about twice that of her own death by that age. Perhaps even more outstanding and certainly of great social significance is the continuing assurance, whatever the bias in Table XXXII above, that the current level of mortality at ages under 45 is so low that widowhood is not a serious source of depletion of the younger married population. Moreover, mortality is comparatively low among married women in the reproductive age-groups.

BIRTHS

The number of live births which occurred in England and Wales in 1961, 811,281, was the highest since 1947; it was 3·3 per cent higher than in 1960 compared with increases of 1·1 per cent and 4·9 per cent between 1958 and 1959 and between 1959 and 1960 respectively. The live birth rate per 1,000 population rose to 17·5, the highest since 1948. The numbers of births since the 1851-60 period classified by legitimacy are shown in Table XXXIII.

Table XXXIII. Live births and birth rates by legitimacy, 1851 to 1961, England and Wales

Period	Total live births	Live birth rate per 1,000 population	All live births per 1,000 women aged 15-44	Legitimate live births	Legitimate live births per 1,000 married women aged 15-44	Illegitimate live births	Illegitimate live births per 1,000 unmarried women aged 15-44
1	2	3	4	5	6	7	8
1851-1860	6,471,650	34·1	144·9	6,048,479	281·0	423,171	18·3
1861-1870	7,500,096	35·2	151·0	7,043,090	287·3	457,006	18·2
1871-1880	8,588,782	35·4	153·6	8,161,584	295·5	427,198	15·1
1881-1890	8,890,238	32·4	138·7	8,471,116	274·6	419,122	12·6
1891-1900	9,155,153	29·9	122·7	8,773,351	250·3	381,802	9·6
1901-1910	9,298,209	27·2	109·0	8,927,791	221·6	370,418	8·2
1911-1920	8,096,222	21·8	87·7	7,706,457	173·5	389,765	8·1
1921-1930	7,129,070	18·3	73·9	6,818,295	143·6	310,775	6·3
1931-1935	3,022,864	15·0	61·7	2,891,469	115·2	131,395	5·5
1936-1940	3,041,652	14·7	60·9	2,913,834	107·3	127,818	5·6
1941-1945	3,346,343	15·9	69·3	3,116,516	105·4	229,827	11·4
1946-1950	3,904,666	18·0	80·9	3,690,413	122·5	214,253	11·7
1951-1955	3,377,098	15·2	72·5	3,216,521	105·0	160,577	10·1
1956	700,335	15·6	77·0	666,801	108·2	33,534	11·4
1957	723,381	16·1	80·0	688,819	111·3	34,562	12·1
1958	740,715	16·4	82·1	704,541	113·6	36,174	12·8
1959	748,501	16·4	83·0	710,340	114·5	38,161	13·5
1960	785,005	17·1	86·7	742,298	119·2	42,707	15·1
1961	811,281	17·5	89·5	762,791	122·1	48,490	17·2

The birth rate per 1,000 population does not permit a true appreciation of fertility trends, changes in which may be masked (in this index) by changes in sectors of the population not concerned with childbearing. Births may be more appropriately related to the number of women of childbearing age (conventionally taken as 15-44) instead of to the total population and, further, the legitimate and illegitimate births may be related to the married and unmarried women respectively in the 15-44 age range; such rates are shown in columns 4, 6 and 8 respectively of Table XXXIII.

In 1961 the live birth rate per 1,000 women aged 15-44 showed an increase of 3·2 per cent over the previous year. Although the number of legitimate live births in 1961 was 31 per cent higher than the average annual number for the period 1936-40, there is also a larger proportion of women in the reproductive age range who are now married with the result that the legitimate live birth rate per 1,000 married women aged 15-44 was only 14 per cent above the rate for 1936-40. Conversely, while the illegitimate birth rate in 1961 was three times the rate in 1936-40 the number of illegitimate births was only 1·9 times as many, due to the smaller number of unmarried women now in this age-group.

Incomplete statement at birth registration

The birth statistics now under consideration are obtained by the analysis of the information given at birth registration. These annual statistics are slightly incomplete due to an occasional failure to obtain a record of the mother's age, duration of marriage, or number of previous children. For all types of information combined this proportion amounted to less than one half per cent in 1961. As no severe bias is expected in this small number of cases they have been distributed proportionally among the "stated" in Tables AA, HH, II and MM. It is considered that most users will find this form of presentation more convenient.

Birth occurrences and registration time lag

The statutory period allowed for registration of either a live birth or a stillbirth is 42 days and there is generally an appreciable time lag between the occurrence of a live birth and its registration. In 1961 the average time lag between the occurrence and the registration of a live birth was fourteen and a half days.

The importance of this time lag from the statistical aspect is its influence on the difference between the births registered in a period and the number occurring in the same period. Occurrences are usually the more appropriate statistics for the measurement of fertility, but figures for registrations are available sooner. The difference between the two is influenced by the time lag in two ways. A difference will occur, even though the time lag is constant, if birth incidence is changing; and also, even though the birth incidence be constant, if the time lag is changing. In practice both factors operate. The combined effect of these factors may be measured by the ratio of occurrences to registrations, which in 1961 was 1.0092. This ratio was higher than is normal owing to the bad weather at the end of the year which caused greater delay than usual in birth registration.

Tabulation basis

The opportunity presented by the introduction of the Population (Statistics) Act, 1960, has been taken to revise some of the tables dealing with births which appear in Part II. Details of the changes are given in the Explanatory Notes to Part II for 1961, which was the first to contain the revised tables. One general effect of this revision has been to increase the number of tables which analyse live births rather than maternities.

Live births are slightly fewer in number than maternities as the stillbirths excluded from the former exceed the multiple births included. The difference is small and legitimate live birth statistics can be converted to maternities with enough accuracy for most purposes by means of the appropriate factors which are shown for 1961 in Table XXXIV.

Table XXXIV. Ratio of legitimate maternities to legitimate live births by age of mother at maternity, 1961, England and Wales

Age of mother at maternity						
All ages	Under 20	20–	25–	30–	35–	40 and over
1.007	1.010	1.007	1.004	1.005	1.012	1.029

Illegitimate births and pre-marital conceptions

Among the 817,271 maternities which occurred in 1961, 49,107 (6·0 per cent) were illegitimate. Tables B and C in Part II and Table XXXIII contain serial records of illegitimate live births since 1851. Numbers of illegitimate maternities since 1938 are shown in Table XXXV which also shows the numbers of pre-maritally conceived legitimate maternities. The number of pre-maritally conceived legitimate maternities has been taken as approximately equivalent to those at marriage durations under nine months (eight-and-a-half before 1952). The combined proportion of extra-maritally conceived maternities is shown in column 5 of Table XXXV.

Table XXXV. Illegitimate maternities and pre-maritally conceived legitimate maternities, 1938 to 1961, England and Wales

Year	Illegitimate maternities	Pre-maritally conceived legitimate maternities*	Total maternities conceived extra-maritally*		Percentage of extra-maritally conceived maternities legitimated by marriage of parents before birth of child
			Numbers	Percentage of all maternities	
1	2	3	4	5	6
1938	27,440	64,530	91,970	14·4	70·2
1939	26,569	60,346	86,915	13·8	69·4
1940-1944† ..	39,542	43,146	82,688	12·4	52·2
1945-1949† ..	49,466	52,557	102,023	13·0	51·5
1950	35,816	54,188	90,004	12·8	60·2
1951	33,444	50,477	83,921	12·3	60·1
1952	33,088	50,740	83,828	12·3	60·5
1953	33,083	50,266	83,349	12·1	60·3
1954	32,128	50,901	83,029	12·2	61·3
1955	31,649	50,638	82,287	12·2	61·5
1956	34,113	54,895	89,008	12·6	61·7
1957	35,098	56,203	91,301	12·5	61·6
1958	36,787	56,581	93,368	12·5	60·6
1959	38,792	57,638	96,430	12·8	59·8
1960	43,281	61,799	105,080	13·3	58·8
1961‡	48,490	66,596	115,086	14·2	57·9

* From 1952 onwards the figures relate to women married once only.

† Annual averages.

‡ Live births.

The age distribution of the mothers of the 48,490 illegitimate children born in 1961 is shown in the following statement, together with comparative figures for 1952:

Illegitimate live births in each age-group per 1,000 at all ages	Year	Age of mother at birth							
		All ages	Under 20	20-	25-	30-	35-	40-	45 and over
{	1961	1,000	245	319	192	128	82	31	2
	1952	1,000	157	294	227	171	107	40	3

In 1961 nearly a quarter of the illegitimate live births were to mothers under 20 (compared with 6 per cent of legitimate live births) and over half were to mothers who were under 25 years of age (compared with 37 per cent of legitimate births). The proportion of the total number of illegitimate births to these younger mothers has risen since 1952 particularly to mothers under 20.

The number of illegitimate live births per 1,000 total live births by age of mother is shown below for 1961, with comparative figures for 1952:

Illegitimate live births per 1,000 total live births	Year	Age of mother at birth							
		All ages	Under 20	20-24	25-29	30-34	35-39	40-44	45 and over
	1961	60	199	62	37	41	51	68	85
	1952	48	176	51	35	38	48	59	68

Again this statement draws attention to mothers under 20, to whom one birth in five is illegitimate. There is less variation with age among the older mothers. The rise at the older ages is probably due to the fact that the proportion of single, widowed and divorced women rises at these older ages. The proportion of illegitimate live births to all births has risen at all ages between 1952 and 1961.

Although the preceding paragraphs have emphasised the part played by younger mothers in the illegitimate sector it should be remembered that, even at the younger ages, only a relatively small proportion of women are involved. The following statement of illegitimate live birth rates shows that the rate is only 8 per thousand for mothers under the age of 20, rises to something over 40 per thousand between the ages of 25 and 34 and declines thereafter:

Illegitimate live births per 1,000 unmarried women	Year	Age of mother at birth							
		All ages	Under 20	20-24	25-29	30-34	35-39	40-44	45 and over
	1961	15·7	8·1	26·2	44·0	40·7	21·5	7·2	0·4
	1952	9·0	3·9	12·7	21·4	21·6	13·1	4·3	0·3

It has already been shown that in recent years there has been a considerable increase in the number of illegitimate live births and also in the illegitimate birth rate. Table XXXVI shows the proportionate change since 1952 in the various types of maternity rate according to the age of mother at maternity.

Table XXXVI. Ratio of legitimate, illegitimate, extra- and pre-maritally conceived maternity rates to those of 1952 taken as 1,000, 1952 to 1961, England and Wales

Age at maternity	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961*	1961†
Legitimate maternities											
All ages under 45	1,000	1,017	1,003	993	1,035	1,065	1,086	1,094	1,138	1,164	1,156
Under 20	1,000	1,032	1,009	973	1,003	1,002	1,021	1,026	1,092	1,119	1,108
20-24	1,000	1,020	1,007	997	1,037	1,053	1,070	1,068	1,079	1,102	1,094
25-29	1,000	1,027	1,017	1,023	1,074	1,107	1,123	1,126	1,173	1,198	1,193
30-34	1,000	994	943	929	961	988	1,003	1,008	1,061	1,076	1,071
35-39	1,000	992	991	980	1,003	1,017	995	953	993	1,012	1,000
40-44	1,000	981	972	920	913	895	868	886	978	999	973
Extra-maritally conceived maternities											
All ages under 45	1,000	1,016	1,032	1,048	1,161	1,221	1,265	1,313	1,426	1,570	1,554
Under 20	1,000	1,033	1,067	1,093	1,267	1,347	1,413	1,447	1,600	1,820	1,800
20-24	1,000	1,027	1,070	1,066	1,172	1,218	1,265	1,313	1,408	1,536	1,524
25-29	1,000	1,008	997	1,073	1,167	1,267	1,332	1,434	1,596	1,790	1,779
30-34	1,000	1,020	993	1,010	1,118	1,199	1,235	1,333	1,503	1,706	1,693
35-39	1,000	983	1,028	1,028	1,133	1,217	1,217	1,228	1,339	1,461	1,439
40-44	1,000	1,000	1,016	1,066	1,115	1,164	1,213	1,311	1,574	1,672	1,639
Illegitimate maternities											
All ages under 45	1,000	1,024	1,017	1,028	1,146	1,211	1,288	1,358	1,511	1,716	1,695
Under 20	1,000	1,032	1,035	1,060	1,222	1,317	1,394	1,481	1,733	2,045	2,015
20-24	1,000	1,053	1,093	1,101	1,236	1,316	1,446	1,549	1,750	2,054	2,032
25-29	1,000	1,005	998	1,066	1,202	1,295	1,427	1,591	1,794	2,105	2,084
30-34	1,000	1,065	1,031	1,044	1,194	1,277	1,375	1,486	1,688	1,971	1,947
35-39	1,000	1,008	1,027	1,051	1,173	1,259	1,275	1,286	1,388	1,617	1,592
40-44	1,000	1,027	1,045	1,081	1,151	1,164	1,273	1,331	1,581	1,662	1,622
Pre-maritally conceived maternities											
All ages under 45	1,000	1,008	1,041	1,059	1,175	1,233	1,256	1,284	1,375	1,485	1,473
Under 20	1,000	1,034	1,076	1,110	1,288	1,363	1,421	1,435	1,559	1,744	1,726
20-24	1,000	1,017	1,065	1,061	1,163	1,199	1,215	1,240	1,297	1,374	1,364
25-29	1,000	1,006	991	1,081	1,142	1,244	1,235	1,275	1,383	1,495	1,489
30-34	1,000	930	918	940	986	1,052	990	1,038	1,145	1,238	1,232
35-39	1,000	892	1,002	941	1,006	1,084	1,012	1,018	1,132	1,159	1,147
40-44	1,000	902	1,000	985	1,008	1,114	1,000	1,152	1,553	1,470	1,432

* Maternities.
† Live births.

This table shows that the illegitimate maternity rate for all ages under 45 combined was 72 per cent higher in 1961 than in 1952 while the legitimate rate was only 16 per cent higher. The increase has been particularly marked since 1958 for both legitimate and illegitimate rates. For all ages under 35 the illegitimate maternity rate in 1961 was about double the corresponding rate in 1952. The increase in the illegitimate rate for mothers over the age of 35, although lower than for the younger mothers, is perhaps in greater contrast to the relatively small changes in the legitimate rates at these ages. The rise in illegitimate maternity rates is partly a reflection of the fact that although increased marriage rates have been reducing the number of unmarried women, there has been no fall in the corresponding number of illegitimate maternities. The following figures for the 30-34 age-group illustrate this point:

	Year				
	1952	1958	1959	1960	1961
Number of unmarried women ('000) aged 30-34	258	185	173	161	153
Number of illegitimate maternities to women aged 30-34	5,614	5,307	5,372	5,690	6,276

It is useful to consider together, especially as regards younger mothers, illegitimate maternities and legitimate maternities at marriage durations under nine months as they both relate to mothers who were unmarried at the time of conception. In Table XXXVII these extra-maritally conceived maternities have been related to the population at risk of producing such maternities. This is the average number of unmarried women between the beginning of April in the stated year and in the preceding year. As an approximation the number of unmarried women at the end of September of the preceding year has been estimated and used as the exposed to risk. These women have been classified by their age at maternity in the usual way.

Table XXXVII. Extra-maritally conceived maternities per 1,000 unmarried women at risk (*see text*), 1938 and 1952 to 1961, England and Wales

Age of mother	1938	1952-55 average	1956	1957	1958	1959	1960	1961*	1961†
15-	11.8	15.7	19.0	20.2	21.2	21.7	24.0	27.3	27.0
20-	32.6	42.8	48.3	50.2	52.1	54.1	58.0	63.3	62.8
25-	24.5	37.8	43.3	47.0	49.4	53.2	59.2	66.4	66.0
30-	15.1	30.8	34.2	36.7	37.8	40.8	46.0	52.2	51.8
35-	10.4	18.2	20.4	21.9	21.9	22.1	24.1	26.3	25.9
40-	4.3	6.2	6.8	7.1	7.4	8.0	9.6	10.2	10.0
15-44 ..	18.6	25.5	28.9	30.4	31.5	32.7	35.5	39.1	38.7
Ratio to 1938									
Crude ..	1.00	1.37	1.55	1.63	1.69	1.76	1.91	2.10	2.08
Standardised by age ..	1.00	1.42	1.63	1.72	1.79	1.85	2.03	2.26	2.23

* Maternities

† Live births

The rate for all extra-maritally conceived maternities is highest for women in their twenties. Unlike the illegitimate maternity rate, the rate for pre-maritally conceived legitimate maternities rises rapidly to a peak in the 20-24 age-group and then declines steadily with age. For the under 20 age-group the pre-maritally conceived maternity rate is 2.4 times as high as the illegitimate maternity rate and in the 20-24 age-group nearly twice as high. At these young ages this group is numerically larger than the illegitimate maternities already discussed

It can be seen from Table XXXVI that the 1961 rate for all extra-maritally conceived maternities was 57 per cent higher than in 1952. In the same way as the illegitimate and the legitimate maternity rates, this rate changed relatively little from 1952 to 1955, rose rapidly to 1959 and sharply since then.

If the incidence of pre-marital conceptions is measured conventionally by the legitimate maternity rate for durations under nine months, Table KK shows that the incidence is highest at ages under 20 where the rate for the first nine months is higher than for the remaining quarter of the first year. This rate then falls steeply to the 20-24 age-group and more slowly thereafter.

Legitimate births and fertility

Age of mother and duration of marriage

The total number of legitimate live births and the corresponding rates per 1,000 married women aged 15-44 irrespective of age of mother and duration of marriage were shown in Table XXXIII. As fertility declines with advancing age of mother and lengthening duration of marriage, these factors must now be taken into account.

Among the legitimate live births which occurred in England and Wales in 1961, 6 per cent were to mothers aged under 20, 62 per cent were to mothers aged between 20 and 29, 29 per cent to mothers aged between 30 and 39 and nearly 3 per cent to mothers aged 40 or over. The distribution in five year age-groups is shown in the following statement:

Legitimate live births in each age-group per 1,000 legitimate live births at all ages ..	Age of mother at birth							
	All ages	Under 20	20-24	25-29	30-34	35-39	40-44	45 and over
	1,000	63	307	314	191	96	27	2

A similar distribution of legitimate live births in England and Wales during 1961 by duration of marriage shows that 56 per cent of all legitimate live births were to mothers whose marriage had lasted less than five years (14 per cent of legitimate live births being to mothers married for less than a year) and 84 per cent to mothers married for less than 10 years:

Legitimate live births in each duration per 1,000 legitimate live births at all durations ..	Marriage duration in completed years									
	All durations	0	1	2	3	4	5-9	10-14	15-19	20 and over
	1,000	139	119	109	102	90	278	116	37	10

In Table II of Part II the legitimate live births to women married once only are classified by both age of mother at birth and the duration of her marriage. Using the mean numbers exposed to risk by current age and marriage duration published in Table JJ, corresponding rates by current age and duration of marriage have been computed and published in Table KK. The rates shown in Table KK are summarised for recent years* in Table XXXVIII which shows the typical pattern of decline with increasing age, as well as with each year of duration after the first. The apparent exception at the longest durations within some lines, mainly for the age-group under 20, is due to the fact that towards the right-hand edge of the table the group becomes confined to fewer single years of age, corresponding to the very youngest marriage ages. In this part of a detailed table by single years of age, fertility rates change more rapidly with marriage age than with duration, and the number of women at the individual ages making up the group increases very quickly with age.

* In terms of maternity rates for 1960 and earlier years.

Table XXXVIII. Legitimate maternity rates for women married once only by age and marriage duration, 1952 to 1961, England and Wales*

Age at maternity	Year	Marriage duration (completed years)										
		All durations	0	1	2	3	4	5-9	10-14	15-19	20-24	25 and over
All ages under 50 ..	1952-55	·088	·280	·260	·222	·203	·180	·115	·048	·019	·006	·001
	1956-60	·096	·307	·278	·245	·227	·205	·130	·054	·021	·006	·001
	1959	·097	·312	·281	·252	·229	·207	·132	·054	·021	·006	·001
	1960	·101	·327	·288	·258	·243	·217	·138	·057	·022	·006	·001
	1961†	·103	·336	·293	·269	·250	·218	·140	·059	·023	·006	·001
Under 20 ..	1952-55	·415	·460	·323	·339	·354	—	—	—	—	—	—
	1956-60	·417	·468	·328	·324	·347	—	—	—	—	—	—
	1959	·416	·468	·330	·331	·342	—	—	—	—	—	—
	1960	·436	·497	·333	·338	·370	—	—	—	—	—	—
	1961†	·443	·510	·335	·321	·276	—	—	—	—	—	—
20-24 ..	1952-55	·253	·272	·278	·246	·237	·222	·205	—	—	—	—
	1956-60	·266	·286	·290	·262	·252	·235	·216	—	—	—	—
	1959	·267	·288	·292	·269	·251	·232	·213	—	—	—	—
	1960	·272	·296	·297	·270	·262	·240	·214	—	—	—	—
	1961†	·276	·299	·301	·281	·267	·238	·214	—	—	—	—
25-29 ..	1952-55	·171	·237	·246	·216	·203	·187	·141	·111	—	—	—
	1956-60	·188	·267	·264	·241	·229	·214	·158	·120	—	—	—
	1959	·188	·270	·268	·248	·230	·217	·159	·121	—	—	—
	1960	·196	·287	·276	·258	·246	·227	·164	·130	—	—	—
	1961†	·198	·292	·288	·267	·256	·229	·166	·132	—	—	—
30-34 ..	1952-55	·099	·230	·238	·199	·181	·164	·107	·068	·069	—	—
	1956-60	·104	·257	·260	·223	·204	·185	·117	·071	·061	—	—
	1959	·105	·256	·268	·228	·209	·189	·119	·072	·061	—	—
	1960	·110	·276	·279	·240	·225	·198	·126	·076	·061	—	—
	1961†	·110	·273	·275	·251	·229	·199	·127	·078	·064	—	—
35-39 ..	1952-55	·049	·167	·183	·148	·133	·124	·079	·042	·035	·041	—
	1956-60	·050	·184	·201	·165	·147	·133	·085	·046	·034	·035	—
	1959	·049	·188	·207	·170	·150	·135	·084	·046	·033	·033	—
	1960	·050	·198	·210	·178	·151	·138	·087	·048	·033	·035	—
	1961†	·051	·190	·203	·185	·158	·142	·090	·050	·034	·034	—
40-44 ..	1952-55	·015	·054	·065	·053	·049	·042	·029	·017	·012	·011	·010
	1956-60	·014	·063	·074	·060	·052	·045	·031	·018	·012	·010	·007
	1959	·013	·067	·074	·059	·057	·046	·031	·017	·011	·009	·007
	1960	·015	·076	·081	·069	·057	·056	·035	·020	·013	·011	·007
	1961†	·015	·076	·083	·064	·062	·054	·034	·021	·013	·010	·007
45-49 ..	1952-55	·001	·004	·003	·004	·003	·003	·002	·002	·001	·001	·001
	1956-60	·001	·003	·004	·004	·004	·003	·002	·002	·001	·001	·001
	1959	·001	·004	·005	·006	·005	·004	·003	·002	·001	·001	·001
	1960	·001	·002	·004	·001	·004	·004	·002	·002	·001	·001	·001
	1961†	·001	·003	·006	·007	·004	·004	·003	·002	·001	·001	·000

* In calculating these rates the few maternities to women whose stated age and marriage duration implied an age at marriage below the legal minimum of 16 have been excluded.

† Legitimate live birth rates.

Table XXXVIII shows that between 1960 and 1961 there was a general rise in rates for all ages under 45. For all ages combined the increase varied from 2 to just over 4 per cent for the duration groups specified in Table XXXVIII apart from durations 4 to 9 and over 20 where the rise was rather less. For all durations combined all age-groups, apart from 30-34 and 40 and over, which hardly changed, showed small increases of 1 or 2 per cent. The rates for women aged 45 and over are subject to relatively large random fluctuations which conceal any change in fertility.

Age at marriage

An alternative classification of legitimate live births to women married once only by age at marriage and year of marriage is given in Table MM (which also shows the number of previous liveborn children); the mean numbers exposed to risk are shown in Table NN and the corresponding rates have been computed

and published in Table OO. Tables NN and OO relate to the integral duration intervals which ended in 1960-61; e.g. duration 2 completed years covers the interval from the second wedding anniversary (falling in 1960) to the third anniversary (falling in 1961).

Table XXXIX which is an extract from Tables 2(a)-2(g) in Appendix A (pages 332-337) shows fertility rates at selected integral durations by age at marriage and for selected periods of maternity from 1947-48 to 1960-61.

Table XXXIX. Fertility rates by age at marriage for selected durations only.
Women married once only, for selected periods, 1947-48 to 1960-61,
England and Wales

Age at marriage				Period	Duration of marriage (completed years)									
					0	1	2	3	4	5	15	20	25	
All ages under 45	..	..	{	1947-48	·301	·330	·258	·222	·203	·186	·045	·015	—
				1952-53	·273	·266	·224	·201	·178	·153	·026	·009	·001	
				1957-58	·298	·277	·237	·222	·204	·177	·030	·008	·001	
				1958-59	·320	·279	·251	·226	·208	·180	·030	·008	·001	
				1959-60	·314	·285	·252	·234	·207	·184	·030	·009	·000	
				1960-61	·328	·289	·265	·249	·219	·191	·030	·009	·001	
Under 20	..	..	{	1947-48	·429	·386	·305	·269	·246	·237	·107	·051	—
				1952-53	·437	·318	·281	·258	·221	·193	·069	·038	·009	
				1957-58	·420	·326	·284	·263	·251	·219	·060	·034	·007	
				1958-59	·433	·327	·295	·265	·250	·222	·055	·032	·006	
				1959-60	·439	·331	·297	·267	·235	·221	·057	·032	·005	
				1960-61	·468	·330	·303	·282	·249	·219	·060	·031	·006	
20-24	..	..	{	1947-48	·311	·348	·269	·234	·217	·199	·054	·018	—
				1952-53	·253	·267	·224	·206	·185	·162	·032	·011	·001	
				1957-58	·268	·270	·237	·225	·209	·186	·033	·008	·001	
				1958-59	·275	·272	·248	·229	·214	·189	·034	·008	·000	
				1959-60	·278	·276	·246	·237	·216	·192	·033	·008	·000	
				1960-61	·283	·281	·261	·251	·226	·201	·033	·009	·000	
25-29	..	..	{	1947-48	·272	·317	·245	·205	·187	·164	·025	·004	—
				1952-53	·227	·257	·216	·185	·173	·155	·012	·001	—	
				1957-58	·265	·269	·224	·215	·193	·162	·012	·001	—	
				1958-59	·275	·272	·247	·222	·200	·165	·012	·001	—	
				1959-60	·277	·280	·251	·231	·196	·172	·012	·001	—	
				1960-61	·291	·289	·264	·248	·208	·179	·013	·001	—	
30-34	..	..	{	1947-48	·191	·277	·205	·170	·143	·121	·006	·000	—
				1952-53	·217	·240	·190	·160	·130	·101	·002	·000	—	
				1957-58	·243	·247	·198	·164	·141	·114	·001	—	—	
				1958-59	·247	·250	·212	·162	·142	·107	·001	—	—	
				1959-60	·264	·257	·206	·177	·138	·112	·001	—	—	
				1960-61	·265	·261	·218	·183	·150	·119	·001	—	—	
35-39	..	..	{	1947-48	·125	·183	·122	·086	·062	·043	—	—	—
				1952-53	·132	·155	·110	·079	·050	·034	—	—	—	
				1957-58	·167	·167	·106	·076	·048	·035	—	—	—	
				1958-59	·175	·165	·120	·083	·052	·036	—	—	—	
				1959-60	·181	·179	·128	·081	·060	·036	—	—	—	
				1960-61	·182	·171	·124	·093	·060	·040	—	—	—	
40-44	..	..	{	1947-48	·038	·051	·030	·016	·008	·005	—	—	—
				1952-53	·039	·033	·025	·007	·006	·003	—	—	—	
				1957-58	·041	·039	·024	·010	·004	·002	—	—	—	
				1958-59	·055	·035	·021	·013	·008	·002	—	—	—	
				1959-60	·053	·045	·020	·011	·006	·002	—	—	—	
				1960-61	·071	·045	·024	·011	·008	·001	—	—	—	

Women who marry under the age of 20 have fertility rates which are markedly higher at each duration than those for all marriage ages combined; there is a difference of about one fifth up to duration 5 and this difference tends to increase at longer durations where increasing maternal age at birth reduces the fertility of the older age-at-marriage groups. Apart from durations 0 and 1 the 20-24 age-at-marriage group differs little from the average for all ages at marriage

combined, as is to be expected since this group accounts for over half the first marriages in most years; nevertheless there is a tendency for their fertility rates to be a little lower than average at short durations and a little higher than average at the longer durations. With the older age-at-marriage groups, maternal age at birth comes to play an increasing part in influencing fertility rates which consequently decrease rapidly with increasing duration.

The general rise in fertility rates between 1959-60 and 1960-61 has affected all age-at-marriage groups. There is some tendency for rates at the shortest durations either to fall slightly or to rise less than the rates for longer durations. The rates for durations 15 and over show little change.

Age of father

Under the provisions of the Population (Statistics) Act, 1960, the age of the father of the child is obtained for statistical purposes in those cases where the father's name is entered in the birth register, i.e. for legitimate births and for illegitimate births registered on the joint information of both parents. The 1961 Part II is the first to contain statistics derived from this information. Details of the age of father distribution appear in part (b) of Table AA which shows paternities and births by age of father and, for births, sex and legitimacy and whether it is live or still. Corresponding rates are shown in Table EE. The numbers of live and still legitimate births by ages of parents in combination appear in the Supplement to Table AA and corresponding stillbirth rates per 1,000 total births in the Supplement to Table FF; these Supplements will only be published at intervals.

The proportional distribution of legitimate live and still births by age of father in 1961 was as follows:

		Age of father at birth								
		All ages	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50 and over
Legitimate births in age-group per 1,000 at all ages	Live	1,000	14	185	319	249	141	62	21	8
	Still	1,000	12	154	283	234	173	93	36	15

The distribution of legitimate live births reflects the older age-at-marriage of husbands. Compared with the mothers' age distribution shown on page 63 there is a consistent upward shift in the fathers' age distribution. There were 6,400 (0·8 per cent) legitimate live births where the father was over 50 years of age; nearly three-quarters of these were related to fathers aged 50-54 and 12 births were related to fathers over the age of 75. There is a tendency for stillbirths to have an older age-of-father distribution than live births. The Supplement to Table FF in Part II shows a tendency for the stillbirth rate to rise with increasing age of mother for a given age of father but no such tendency to rise with increasing age of father for a given age of mother. This would imply that father's age has relatively little effect on stillbirth rates.

Legitimate birth rates by age of father are shown in Table EE of Part II and the legitimate live birth rates are reproduced below:

Legitimate live births per 1,000 married men.. ..	Age of father at birth								
	All ages	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50 and over
	63·8	621·0	305·4	235·0	151·6	77·0	35·4	11·3	1·3

Compared with the rates for mothers, shown in Table XXXVIII, the age rates for fathers are higher at all ages. This again reflects the age-at-marriage differential, because the fathers in a given age-group will tend to be married to women younger than themselves; the fathers in the under 20 age-group tend to be married to wives even younger than themselves (see page 29) whose fertility rates are extremely high.

Cohort analysis

A proper appreciation of fertility trends needs more than the examination of fertility rates by year of maternity. It is necessary to follow women married in a particular period, through their reproductive lives. Such a group is generally called a *cohort*, and the study of fertility records in this form, *cohort analysis*. Cohort analysis can help to avoid the misleading impression which may be made by the births of any one period such as a year when either family size or the timing of births is changing.

Tables of mean family sizes and fertility rates for women married once only have been computed for each marriage cohort since 1920 and appear in Appendix A (pages 326 to 337). The mean family size tables (Tables 1(a) to 1(g)) show the average number of liveborn children after each single year of marriage duration separately for each age-at-marriage group. The set of fertility rate tables (Tables 2(a) to 2(g)) shows the average annual increments by which the mean family size has been built up. The two sets of tables have been produced each year by using the lines of Tables OO and PP as diagonal additions to data produced by linking data from the 1946 Sample Family Census of the Royal Commission on Population, the 1951 Census of England and Wales and the annual vital registration records.

Table XL shows the achieved mean family size at selected durations for selected cohorts; these figures have been taken from the full series in Tables 1(a) to 1(g) of Appendix A in order to illustrate the main features of this series of tables. The basic characteristic is a decline in family size up to the period of the Second World War and a tendency to rise since then. In Table XL the slight fall between the cohorts of 1929 and 1934 is typical of the pre-war period. The 1939 cohort illustrates the effect of the war at the short durations in creating a relative deficiency which was later more than made good with the result that its family size at long durations is slightly higher than for the earlier cohorts identified. The 1944 cohort passed through the period of buoyant fertility after the Second World War but there are signs that later cohorts are moving towards even higher family sizes.

Table XL. Mean family size of selected cohorts since 1929 by age at, and duration of, marriage, England and Wales

Age at marriage	Cohort	Duration of marriage (exact years)									
		1	2	3	4	5	6	11	16	21	26
All ages under 45 . . .	1929	.37	.63	.82	.98	1.13	1.26	1.72	1.96	2.06	2.08
	1934	.34	.59	.77	.94	1.08	1.21	1.67	1.95	2.02	2.03
	1939	.25	.47	.65	.82	.99	1.14	1.74	1.95	2.03	—
	1944	.29	.58	.83	1.05	1.24	1.39	1.85	2.06	—	—
	1949	.33	.62	.84	1.04	1.22	1.38	1.89	—	—	—
	1954	.32	.58	.81	1.03	1.24	1.42	—	—	—	—
	1959	.35	.64	—	—	—	—	—	—	—	—
	1960	.37	—	—	—	—	—	—	—	—	—
Under 20 . . .	1929	.65	.95	1.20	1.41	1.60	1.77	2.50	3.00	3.33	3.42
	1934	.64	.94	1.18	1.38	1.58	1.76	2.48	3.09	3.32	3.39
	1939	.43	.70	.93	1.12	1.32	1.51	2.35	2.77	2.99	—
	1944	.38	.68	.96	1.23	1.46	1.65	2.28	2.63	—	—
	1949	.48	.84	1.12	1.38	1.60	1.81	2.52	—	—	—
	1954	.47	.78	1.06	1.32	1.57	1.79	—	—	—	—
	1959	.47	.80	—	—	—	—	—	—	—	—
	1960	.50	—	—	—	—	—	—	—	—	—
20-24 . . .	1929	.41	.70	.90	1.08	1.24	1.39	1.92	2.22	2.36	2.37
	1934	.37	.63	.84	1.02	1.18	1.31	1.85	2.19	2.29	2.30
	1939	.24	.47	.66	.84	1.03	1.20	1.87	2.12	2.20	—
	1944	.28	.58	.85	1.08	1.28	1.44	1.94	2.17	—	—
	1949	.32	.62	.84	1.04	1.23	1.40	1.94	—	—	—
	1954	.28	.54	.76	.99	1.20	1.40	—	—	—	—
	1959	.31	.59	—	—	—	—	—	—	—	—
	1960	.32	—	—	—	—	—	—	—	—	—
25-29 . . .	1929	.26	.50	.68	.83	.96	1.09	1.46	1.61	1.65	1.65
	1934	.25	.48	.65	.80	.94	1.06	1.45	1.62	1.65	1.65
	1939	.20	.40	.57	.74	.90	1.04	1.57	1.71	1.73	—
	1944	.26	.55	.79	1.00	1.17	1.31	1.71	1.84	—	—
	1949	.29	.56	.76	.95	1.12	1.26	1.70	—	—	—
	1954	.28	.54	.76	.98	1.18	1.35	—	—	—	—
	1959	.33	.62	—	—	—	—	—	—	—	—
	1960	.35	—	—	—	—	—	—	—	—	—
30-34 . . .	1929	.28	.49	.63	.75	.84	.92	1.13	1.16	1.16	1.16
	1934	.25	.44	.58	.71	.80	.88	1.08	1.14	1.14	1.14
	1939	.23	.41	.55	.67	.80	.91	1.20	1.23	1.23	—
	1944	.26	.51	.72	.89	1.03	1.13	1.34	1.37	—	—
	1949	.26	.50	.68	.84	.97	1.08	1.31	—	—	—
	1954	.30	.53	.72	.88	1.02	1.14	—	—	—	—
	1959	.34	.60	—	—	—	—	—	—	—	—
	1960	.34	—	—	—	—	—	—	—	—	—
35-39 . . .	1929	.28	.40	.50	.54	.58	.60	.66	.66	—	—
	1934	.26	.40	.49	.55	.59	.62	.65	.66	—	—
	1939	.19	.31	.38	.45	.50	.52	.60	.60	—	—
	1944	.20	.37	.49	.58	.63	.67	.70	.70	—	—
	1949	.21	.37	.48	.55	.61	.64	.68	—	—	—
	1954	.23	.40	.50	.58	.63	.67	—	—	—	—
	1959	.27	.44	—	—	—	—	—	—	—	—
	1960	.27	—	—	—	—	—	—	—	—	—
40-44 . . .	1929	.18	.20	.21	.22	.22	.22	.24	—	—	—
	1934	.28	.32	.34	.35	.36	.36	.36	—	—	—
	1939	.10	.13	.14	.15	.15	.15	.16	—	—	—
	1944	.13	.18	.21	.22	.23	.23	.23	—	—	—
	1949	.14	.18	.20	.21	.22	.22	.22	—	—	—
	1954	.15	.19	.22	.22	.23	.23	—	—	—	—
	1959	.16	.21	—	—	—	—	—	—	—	—
	1960	.18	—	—	—	—	—	—	—	—	—

There are some noticeable departures from the pattern shown by the figures for all marriage ages under 45 combined when the separate age-at-marriage groups are considered. The wartime cohorts (1939 and 1944) for those married under the age of 20 lag behind the pre-war cohorts at the short durations but, unlike the experience of other age-at-marriage groups, the deficiency is made good at longer durations of marriage; the 1949 cohort family size rose to the pre-war level for those married under 20, but so far the 1954 cohort appears to be lagging behind the 1949 cohort in family size although the difference is decreasing.

For those married between the ages of 25 and 34, the post-war cohorts in Table XL have consistently larger families than the pre-war cohorts (including 1939). The effect of the Second World War is most marked in the older age-at-marriage groups where, because of higher age at maternity, those affected by the war at short durations (the 1939 cohort in Table XL) had less opportunity to make up at longer durations for the low fertility which was general during the war.

The cumulative effect of the recent rise in fertility rates at short durations is illustrated by Table XLI which shows, for all marriage ages combined, the ratio of the mean family sizes achieved by recent cohorts at short durations to that reached by the 1949 cohort at the same durations.

Table XLI. Ratio of mean family size of marriage cohorts 1949-60 at short duration to those of 1949 cohort taken at 1,000, all marriage ages under 45, England and Wales

Cohort	Marriage duration (exact years)										
	1	2	3	4	5	6	7	8	9	10	11
1949 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1951 ..	928	921	943	956	966	978	988	996	999	1,003	—
1953 ..	949	933	965	987	1,007	1,022	1,034	1,044	—	—	—
1955 ..	982	957	996	1,021	1,039	1,058	—	—	—	—	—
1956 ..	1,012	984	1,033	1,059	1,080	—	—	—	—	—	—
1957 ..	1,018	990	1,039	1,078	—	—	—	—	—	—	—
1958 ..	1,051	1,018	1,075	—	—	—	—	—	—	—	—
1959 ..	1,063	1,030	—	—	—	—	—	—	—	—	—
1960 ..	1,105	—	—	—	—	—	—	—	—	—	—

The effect of the higher short duration fertility rates is illustrated first by the manner in which the 1951 and 1953 cohorts, which started off with lower family sizes than the 1949 cohort, have by the latest durations shown in Table XLI more than made good their deficiency, and second by the high family sizes at the short durations for the most recent cohorts.

Ultimate family size

For the early cohorts shown in Tables 1(a)-1(g) of Appendix A the ultimate family size is known but the women married since 1930 have not yet all completed their childbearing and to estimate their mean ultimate family size projections have been made from 1961. The first projection shown in Table XLII assumes that future fertility rates by marriage age and duration will be equal to the mean of those experienced in 1951-55; the second uses similar rates equal to those experienced in 1960-61. With the relative stability of fertility rates at longer durations already noted, whether the basis of projection is the fertility rates of 1951-55 or those of 1960-61 makes relatively little difference to marriage cohorts before 1951 but for later marriage cohorts the use of the 1960-61 fertility rates gives mean ultimate family sizes rather higher than those derived from the 1951-55 rates. The element of projection (though not of course the margin of error) amounts to between 10 and 20 per cent of the total for marriages of 1949-51 and to 20 per cent or over for more recent marriages, the figures

gradually becoming more speculative. Whichever assumption is used the projected mean ultimate family sizes are unlikely to be appreciably in error for marriages of 1945 or earlier.

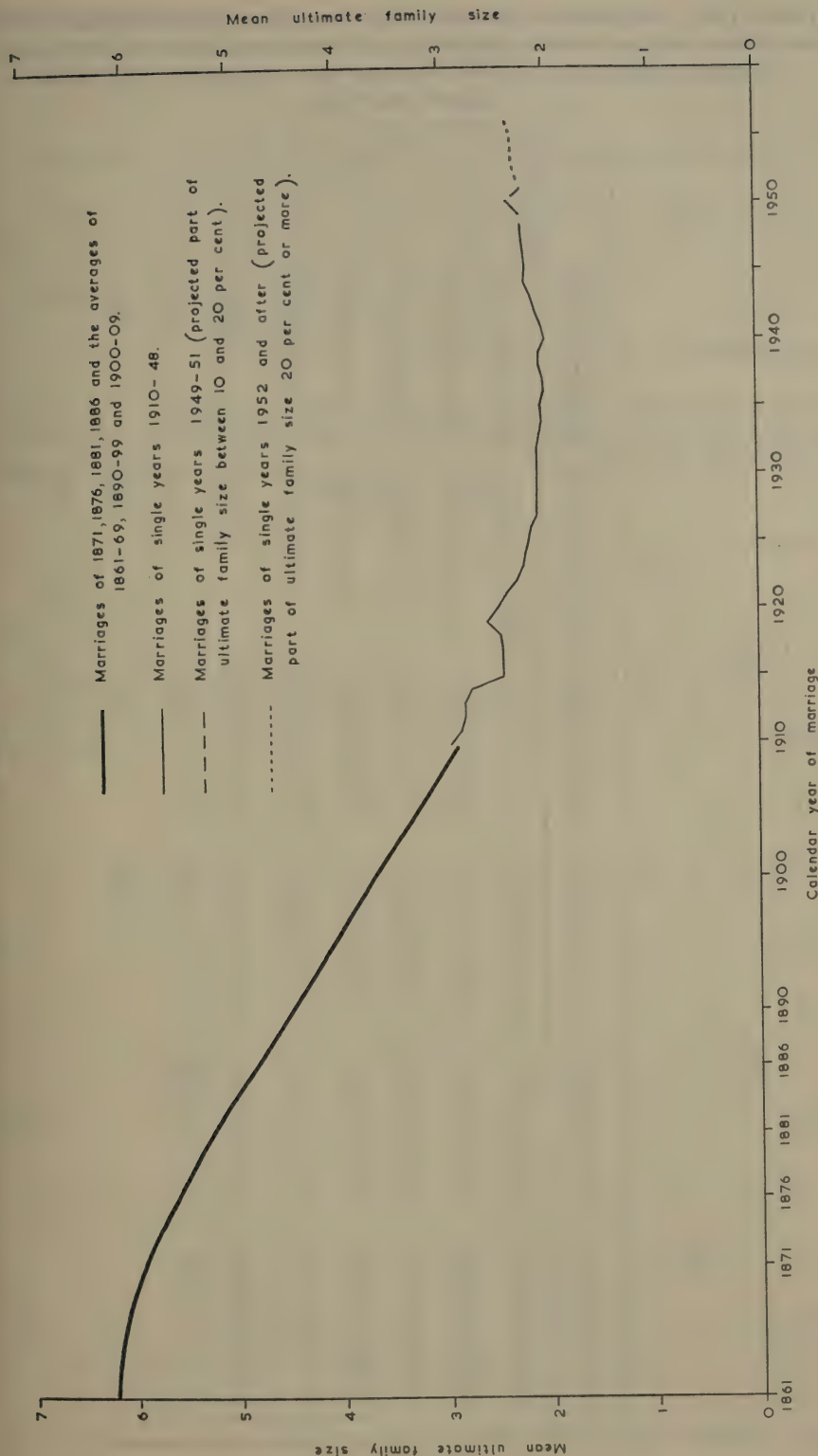
Table XLII. Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales

Calendar year of marriage	Mean ultimate family size (actual)	Calendar year of marriage	Mean ultimate family size (actual)	Calendar year of marriage	Projected mean ultimate family size using fertility rates for	
					1951-55	1960-61
1861-69	6.16	1910	2.95	1930	2.09	2.09
		1911	2.83	1931	2.08	2.08
1871	5.94	1912	2.80	1932	2.08	2.08
		1913	2.81	1933	2.06	2.06
1876	5.62	1914	2.73	1934	2.03	2.03
1881	5.27	1915	2.43	1935	2.04	2.04
		1916	2.43	1936	2.01	2.01
1886	4.81	1917	2.44	1937	2.02	2.02
		1918	2.45	1938	2.06	2.06
1890-99	4.13	1919	2.57	1939	2.05	2.05
1900-09	3.30	1920	2.47	1940	1.99	1.99
		1921	2.38	1941	2.03	2.03
		1922	2.28	1942	2.08	2.08
		1923	2.23	1943	2.14	2.13
		1924	2.21	1944	2.18	2.17
		1925	2.17	1945	2.17	2.17
		1926	2.14	1946	2.19	2.18
		1927	2.09	1947	2.21	2.20
		1928	2.08	1948	2.22	2.22
		1929	2.08	1949	2.23	2.23
				1950	2.34	2.35
				1951	2.22	2.25
				1952	2.26	2.30
				1953	2.29	2.36
				1954	2.29	2.39
				1955	2.31	2.43
				1956	2.35	2.50

It is necessary to bear in mind that the rise in ultimate family size for the most recent cohorts may be a product of the method of projection which implicitly assumes, by the use of current fertility rates for all durations, that the rates at longer durations will be unaffected by the high fertility at short durations.

Diagram 4 shows the mean ultimate family size of marriage cohorts since 1861, using the assumptions based on 1951-55 fertility rates for the recent cohorts. Table XLIII below shows the proportion of mean ultimate family size (actual or projected) achieved by a given duration; the fertility rates of 1960-61 have been used for the projected element.

Diagram 4



Mean ultimate family size of marriage cohorts since 1861, all marriage ages under 45, England and Wales

Table XLIII. Proportion of ultimate family size (actual or projected) for women married once only at selected durations (exact years) and age-at-marriage groups.
Completed family size = 1,000. Selected years of marriage, 1929-1960,
England and Wales
Using fertility rates for 1960-61

Age at marriage	Cohort	Duration of marriage (exact years)									
		1	2	3	4	5	10	15	20	25	30
All ages under 45 ..	1929	178	303	394	471	543	793	923	986	1,000	—
	1934	167	291	379	463	532	778	946	990	1,000	—
	1939	122	229	317	400	483	810	941	985	—	—
	1944	134	267	382	484	571	825	935	—	—	—
	1949	148	278	377	466	547	812	—	—	—	—
	1954	134	243	339	431	519	—	—	—	—	—
	1955	136	247	342	436	523	—	—	—	—	—
	1956	136	244	344	440	528	—	—	—	—	—
	1957	134	245	344	443	—	—	—	—	—	—
	1958	136	244	349	—	—	—	—	—	—	—
Under 20 ..	1959	135	247	—	—	—	—	—	—	—	—
	1960	141	—	—	—	—	—	—	—	—	—
	1929	190	278	351	412	468	693	848	962	997	1,000
	1934	188	277	347	406	465	688	885	968	997	—
	1939	140	227	302	364	429	724	880	961	—	—
	1944	130	233	329	421	500	747	880	—	—	—
	1949	149	260	347	427	495	746	—	—	—	—
	1954	143	237	322	401	477	—	—	—	—	—
	1955	138	235	321	404	474	—	—	—	—	—
	1956	139	236	326	408	483	—	—	—	—	—
20-24 ..	1957	138	234	324	408	—	—	—	—	—	—
	1958	140	239	328	—	—	—	—	—	—	—
	1959	140	239	—	—	—	—	—	—	—	—
	1960	148	—	—	—	—	—	—	—	—	—
	1929	173	295	380	456	523	776	916	987	1,000	—
	1934	161	274	365	443	513	761	935	991	1,000	—
	1939	109	213	299	380	466	805	941	991	—	—
	1944	123	256	374	476	564	824	943	—	—	—
	1949	140	271	367	454	537	812	—	—	—	—
	1954	118	227	319	416	504	—	—	—	—	—
25-29 ..	1955	120	231	326	421	512	—	—	—	—	—
	1956	122	232	333	431	520	—	—	—	—	—
	1957	121	230	331	431	—	—	—	—	—	—
	1958	124	232	340	—	—	—	—	—	—	—
	1959	123	235	—	—	—	—	—	—	—	—
	1960	127	—	—	—	—	—	—	—	—	—
	1929	158	303	412	503	582	848	964	1,000	—	—
	1934	152	291	394	485	570	830	976	1,000	—	—
	1939	116	231	329	428	520	873	977	994	—	—
	1944	140	296	425	538	629	892	978	—	—	—
30-34 ..	1949	156	301	409	511	602	882	—	—	—	—
	1954	138	266	374	483	581	—	—	—	—	—
	1955	145	275	386	493	589	—	—	—	—	—
	1956	146	274	392	500	599	—	—	—	—	—
	1957	148	273	389	505	—	—	—	—	—	—
	1958	151	279	397	—	—	—	—	—	—	—
	1959	150	282	—	—	—	—	—	—	—	—
	1960	158	—	—	—	—	—	—	—	—	—
	1929	241	422	543	647	724	957	1,000	—	—	—
	1934	219	386	509	623	702	930	1,000	—	—	—
35-39 ..	1939	187	333	447	545	650	959	1,000	—	—	—
	1944	190	372	526	650	752	971	1,000	—	—	—
	1949	194	373	507	627	724	963	—	—	—	—
	1954	210	371	503	615	713	—	—	—	—	—
	1955	212	377	514	623	719	—	—	—	—	—
	1956	216	379	516	634	732	—	—	—	—	—
	1957	209	373	510	627	—	—	—	—	—	—
	1958	213	374	516	—	—	—	—	—	—	—
	1959	217	382	—	—	—	—	—	—	—	—
	1960	217	—	—	—	—	—	—	—	—	—
35-39 ..	1929	424	606	758	818	879	985	1,000	—	—	—
	1934	394	606	742	833	894	985	1,000	—	—	—
	1939	317	517	633	750	833	983	1,000	—	—	—
	1944	286	529	700	829	900	1,000	—	—	—	—
	1949	309	544	706	809	897	1,000	—	—	—	—
	1954	324	563	704	817	887	—	—	—	—	—
	1955	338	541	689	797	878	—	—	—	—	—
	1956	338	545	701	818	896	—	—	—	—	—
	1957	329	532	696	810	—	—	—	—	—	—
	1958	321	543	704	—	—	—	—	—	—	—
35-39 ..	1959	338	550	—	—	—	—	—	—	—	—
	1960	338	—	—	—	—	—	—	—	—	—

Table XLIII—continued

Age at marriage	Cohort	Duration of marriage (exact years)									
		1	2	3	4	5	10	15	20	25	30
40-44	1929	750	833	875	917	917	1,000	—	—	—	—
	1934	778	889	944	972	1,000	—	—	—	—	—
	1939	625	813	875	938	938	1,000	—	—	—	—
	1944	565	783	913	957	1,000	—	—	—	—	—
	1949	636	818	909	955	1,000	—	—	—	—	—
	1954	652	826	957	957	1,000	—	—	—	—	—
	1955	652	826	913	957	1,000	—	—	—	—	—
	1956	680	840	920	960	1,000	—	—	—	—	—
	1957	682	818	909	1,000	—	—	—	—	—	—
	1958	640	840	920	—	—	—	—	—	—	—
	1959	640	840	—	—	—	—	—	—	—	—
	1960	667	—	—	—	—	—	—	—	—	—

Table XLIV. Proportion of ultimate family size (actual or projected) for women married once only at selected durations (exact years) and selected age-at-marriage groups. Completed family size = 1,000. Selected years of marriage, 1929-1960, England and Wales

Using fertility rates for 1951-55

Age at marriage	Cohort	Duration of marriage (exact years)									
		1	2	3	4	5	10	15	20	25	30
All ages under 45	1929	178	303	394	471	543	793	923	986	1,000	—
	1934	167	289	377	461	529	775	941	985	995	—
	1939	122	229	317	400	483	810	941	985	—	—
	1944	133	266	381	482	569	821	931	—	—	—
	1949	148	278	377	466	547	812	—	—	—	—
	1954	140	253	354	450	541	—	—	—	—	—
	1955	143	260	359	459	550	—	—	—	—	—
	1956	145	260	366	468	562	—	—	—	—	—
	1957	145	264	370	477	—	—	—	—	—	—
	1958	149	268	383	—	—	—	—	—	—	—
	1959	159	275	—	—	—	—	—	—	—	—
	1960	158	—	—	—	—	—	—	—	—	—
Under 20	1929	190	278	351	412	468	693	848	962	997	1,000
	1934	188	276	347	406	465	688	885	968	997	—
	1939	139	227	301	362	427	722	877	958	—	—
	1944	129	231	325	417	495	739	871	—	—	—
	1949	147	258	344	423	491	739	—	—	—	—
	1954	147	244	331	413	491	—	—	—	—	—
	1955	143	244	333	419	492	—	—	—	—	—
	1956	145	246	341	426	505	—	—	—	—	—
	1957	146	247	342	430	—	—	—	—	—	—
	1958	149	253	348	—	—	—	—	—	—	—
	1959	150	255	—	—	—	—	—	—	—	—
	1960	159	—	—	—	—	—	—	—	—	—
20-24	1929	173	295	380	456	523	776	916	987	1,000	—
	1934	161	274	365	443	513	761	935	991	1,000	—
	1939	108	212	297	378	464	802	937	986	—	—
	1944	123	254	373	474	561	820	939	—	—	—
	1949	140	271	367	454	537	812	—	—	—	—
	1954	123	237	333	434	526	—	—	—	—	—
	1955	127	245	345	445	541	—	—	—	—	—
	1956	131	249	358	463	559	—	—	—	—	—
	1957	132	251	361	471	—	—	—	—	—	—
	1958	138	258	378	—	—	—	—	—	—	—
	1959	158	267	—	—	—	—	—	—	—	—
	1960	145	—	—	—	—	—	—	—	—	—
25-29	1929	158	303	412	503	582	848	964	1,000	—	—
	1934	152	291	394	485	570	830	976	1,000	—	—
	1939	116	231	329	428	520	873	977	1,000	—	—
	1944	140	296	425	538	629	892	978	—	—	—
	1949	157	303	411	514	605	886	—	—	—	—
	1954	145	280	394	508	611	—	—	—	—	—
	1955	154	292	410	523	626	—	—	—	—	—
	1956	158	296	423	541	648	—	—	—	—	—
	1957	163	301	429	556	—	—	—	—	—	—
	1958	170	314	448	—	—	—	—	—	—	—
	1959	175	328	—	—	—	—	—	—	—	—
	1960	186	—	—	—	—	—	—	—	—	—

From the section of Table XLIII relating to women married at all ages under 45, it can be seen that in general a little over a half of the ultimate family size is achieved by the fifth wedding anniversary and that by the tenth anniversary about 80 per cent of the ultimate family size has been achieved. Among the cohorts shown in Table XLIII, those up to and including 1949 have similar timing patterns, apart from the disturbance caused by the Second World War which retarded the family building of the 1939 cohort—this slowing down was however made up by duration 10. From the figures given for the most recent cohorts it would appear that they are building their families more slowly than the cohorts of 1949 and earlier years. It seems more likely, however, that this is an indication only that the assumed ultimate family size is too high (for these recent cohorts this ultimate family size is mainly composed of the cumulated 1960–61 duration fertility rates). Table XLIV shows the results obtained if the 1951–55 duration fertility rates are used for the projected element, implying smaller ultimate family sizes. The apparent slowing down for recent cohorts in Table XLIII is replaced by an acceleration in the growth of family size as measured by the proportion achieved by a given duration. This is more realistic since in the light of the changes in the distribution of family sizes for recent cohorts which are discussed later, it seems likely that there has indeed been some acceleration recently.

As would be expected, the women who married under the age of 20 and who have a longer effective childbearing period are slightly slower in building up their complete families; by their tenth wedding anniversary they have achieved about 70 per cent of their ultimate family size compared with about 80 per cent for women married at all ages under 45 and with 85 to 90 per cent for those married at 25–29. The effect of the Second World War on the timing pattern of the 1939 cohort is visible in all the age-at-marriage groups identified in Tables XLIII and XLIV.

Replacement

Reproduction rates

The *gross reproduction rate* is a measure of annual fertility which is standardised for the detailed sex-age composition of the population. It is calculated by summing the female age fertility rates (live female births per woman in each age-group) multiplied by the width of the age-groups used. Values of the gross reproduction rate for the period 1841–1961 are shown in Table XLV.

Table XLV. Gross and net reproduction rates, 1841 to 1961, England and Wales

Year	G.R.R.	N.R.R.	Year	G.R.R.	N.R.R.
3-year averages			Individual years or annual averages		
1841	2.237	1.349	1938	0.897	0.805
1851	2.264	1.381	1939–49	1.031	0.945
1861	2.277	1.427	1950–54	1.061	1.015
1871	2.356	1.511	1955	1.077	1.038
1881	2.252	1.511	1956	1.146	1.107
1891	1.973	1.369	1957	1.190	1.149
1901	1.702	1.238	1958	1.221	1.182
1911	1.428	1.121	1959	1.230	1.190
1923	1.153	0.966	1960	1.291	1.252
1933	0.862	0.756	1961	1.346	1.303

The *net reproduction rate* (also shown in Table XLV) differs from the gross rate by being discounted for the mortality of the period. At one time the N.R.R. was widely used, not as an index of the births and deaths of the year but as a measure of the implications of current family building habits and mortality for the ultimate replacement of the population. In this sense it is now discredited, because it would imply unrealistic and even inconsistent assumptions, at least in societies where family limitation is practised. The N.R.R. is subject to many of the temporary influences which affect annual numbers of births. The figures are, however, shown here in order to make it possible to maintain serial records once started in this form.

The net reproduction rate for 1961 was 1.303 compared with a value of 1.252 in 1960, an increase of 0.051. It is possible to analyse this increase into the separate components which have contributed to it. For the change between 1960 and 1961 such an analysis produces the following results:

Change due to increase in legitimate fertility	..	+0.025
Change due to increase in illegitimate fertility	..	+0.011
Effect of ageing of population . . . . .	..	-0.000
Effect of change in marriage incidence	..	+0.015
		<hr/>
Balance .. . . .	..	+0.051
		<hr/>

Generation replacement rates

The conventional net reproduction rate described above can be improved by taking into account marriage as well as fertility and mortality. Even reproduction rates refined in this way, if they relate to a year or similar period are subject to distortions and fluctuations when the time-pattern of family building is changing though ultimate family size may be constant.

Nevertheless it is possible to calculate a hypothetical replacement rate assuming that a given set of marriage, fertility, widowhood and divorce rates will continue. If cohort analysis indicates that such rates represent a stable pattern then such replacement rates may be taken to summarise the habits of the generations and cohorts currently passing through the reproductive period. In the *Fertility Report* of the 1951 Census a generation replacement rate was calculated by multiplying the age-duration fertility rates for 1951-55 by the population of women in a female nuptiality table for England and Wales which was specific by duration of marriage. This gave a female generation replacement rate, according to female nuptiality, of 1.01.

The replacement rate of actual generations since 1838-43 were shown and discussed in the 1956 Commentary (pages 23-24). The number of female births to the 1838-43 generation of women, the last before the spread of family limitation, was about 40 per cent above replacement level. Then followed a decline in the replacement rate until, with the 1903-08 generation, it was 30 per cent short of the number needed for replacement. Since then the rate has been rising and, if present trends continue, will reach replacement with the generation born in 1943-48 or a little earlier if marriage rates continue above the 1951-55 level.

The rate of the rise has been slowing down and there are no clear indications at present that it will carry the rate very much higher. The greater part of the

recovery in the level of the replacement rates since the 1903-08 generation has been due to improved mortality (mainly in infancy) and higher marriage rates, and in both these respects there is now limited scope for further improvement.

Birth order

The legitimate live births of the year to women married once only are tabulated by birth order as well as mother's age at birth in Table HH. In 1961, 37 per cent of all births were first births, 31 per cent second, 16 per cent third and 16 per cent fourth or higher order births, a distribution which differs little from that of earlier years.

Table MM gives a three-fold classification by mother's age at marriage, duration of marriage and birth order and makes it possible to investigate the share of births of different orders in the recent rise in fertility rates. True birth order rates would relate, say, the second live births of mothers married in 1953 at age 20-24 to the estimated number of women in that group who have so far had one child. It has not so far been possible to carry out the considerable work of making a series of such estimates in line with those of mean family size in the 1955 Commentary. In recent Commentary volumes a series of rates was computed relating the live births of each calendar year from 1952 to 1960, classified by birth order, to *all* the women married for the first time in the same marriage year and marriage age as the mothers concerned. In effect the marriage age cohort rates of Table OO (style of 1952-55, but live births) were subdivided by birth order in proportion to Table MM. In the present volume these rates back to 1952 have been revised to show rates for each cohort at each marriage duration rather than for each calendar year as hitherto. This puts these rates on the same duration basis as Table OO. The rates on the revised basis up to 1960-61 are shown in Appendix B on pages 338 to 357.

It is possible to make use of the rates in Appendix B to estimate the family size distribution of the marriages of recent cohorts at successive marriage durations. If the number of women married for the first time is taken as 10,000 and the rates in Appendix B are applied successively an estimate of the family size distribution is obtained. Thus, for example, the rates for the first few marriage durations for the women married in 1951 under the age of 20 are shown in Appendix B as:

Year of birth	Duration (completed years)	Live births per 1,000 women married once only irrespective of parity					
		Number of previous children					
		All	0	1	2	3	4 and over
1951/2 ..	0	429	426	3	0	0	0
1952/3 ..	1	318	227	89	2	0	0
1953/4 ..	2	277	101	154	21	1	0
1954/5 ..	3	258	61	137	54	6	0

The above rates would produce a family size distribution per 1,000 at all parities at exact marriage durations as specified as follows:

Duration (exact years)	Number of children in family					
	All	0	1	2	3	4 and over
0	1,000	970	28	2	0	1
1	1,000	544	450	5	0	1
2	1,000	317	588	92	2	1
3	1,000	216	536	225	22	2
4	1,000	154	460	308	70	8

These values are obtained by successive addition of the births shown above to the starting population. Thus the line for exact duration 1 is obtained from the line for exact duration 0 (wedding date) by adding the rates shown for duration 0 completed years; the number of childless families at exact duration 1 is 970 (number at exact duration 0) minus 426 (the number having a first child in the first year of marriage) which gives a result of 544. Similarly the number with one child at exact duration 1 is obtained by taking 28 (the number at exact duration 0) adding 426 (the number having a first child during the first year of marriage) and subtracting 3 (the number having a second child during the first year of marriage) to produce the result of 450 per thousand with one child families at the first wedding anniversary. In order to allow for pre-marital births the wedding date distribution is not simply one of 1,000 women with no children. Distributions similar to that started above have been constructed for each marriage cohort since 1951 for each five year age-at-marriage group under 40 and these distributions appear in Table XLVI.

The women of the 1951 marriage cohort reached their tenth wedding anniversary in 1960-61 and Table XLVI shows how the proportions of women with 0, 1, 2, 3 and 4 or more children have changed with advancing marriage duration. The number per 1,000 women who are childless at the time of marriage is estimated at 964, the value found at the 1946 Family Census which, in the absence of any later information, has been assumed to have remained unchanged. During the first few years of marriage the proportion childless declines sharply but the speed of the decline slackens until by the tenth wedding anniversary the proportion is levelling off at about 16 per cent (this may be compared with the 20 per cent childless recorded at the 1951 Census for the women who had completed their families). The proportion of mothers with one child rises quickly for the first two years of marriage, then flattens at about 46 per cent before falling slowly to about 25 per cent by the tenth wedding anniversary. The rate of decrease after the eighth anniversary is again relatively slow. The proportion with two children is negligible before the second wedding anniversary and then rises steadily to 30 per cent by the sixth anniversary, rises more slowly to 34 per cent by the eighth anniversary, after which there is little change to the tenth anniversary which, as already noted, is as far as the 1951 cohort can yet be followed. The proportion of mothers with three and with four or more children rises slowly but steadily as far as the tenth wedding anniversary; the proportion with three children rises from 1 per cent at the third anniversary to 15 per cent at the tenth anniversary, while the proportion with four or more children rises from 1 per cent at the fifth anniversary to 9 per cent at the tenth anniversary.

Table XLVI. Family size distribution per 1,000 women married once only, by duration of, calendar year of, and age at marriage, England and Wales

(a) Age at marriage—All ages under 45

Duration of marriage (exact years)			Number of liveborn children	Calendar year of marriage										
				1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
0	..	{	0	964	964	964	964	964	964	964	964	964	964	964
			1	32	32	32	32	32	32	32	32	32	32	32
			2	3	3	3	3	3	3	3	3	3	3	3
			3	1	1	1	1	1	1	1	1	1	1	1
			4 and over	1	1	1	1	1	1	1	1	1	1	1
1	..	{	0	701	695	694	693	682	672	670	648	654	642	—
			1	292	298	299	300	310	320	322	343	337	349	—
			2	6	6	6	6	6	6	6	6	6	7	—
			3	1	1	1	1	1	1	1	1	1	2	—
			4 and over	1	1	1	1	1	1	1	1	1	1	—
2	..	{	0	490	483	483	486	465	452	451	429	435	—	—
			1	451	457	458	455	477	485	484	500	492	—	—
			2	55	56	55	54	54	58	60	66	68	—	—
			3	3	3	3	3	3	4	4	4	4	—	—
			4 and over	1	1	1	1	1	1	1	1	1	—	—
3	..	{	0	386	379	373	372	349	335	338	312	—	—	—
			1	457	463	464	468	485	485	476	488	—	—	—
			2	141	142	146	145	149	161	166	178	—	—	—
			3	14	14	15	14	15	17	18	19	—	—	—
			4 and over	2	2	2	2	2	2	2	2	—	—	—
4	..	{	0	316	308	296	294	274	260	260	—	—	—	—
			1	427	432	435	436	447	441	428	—	—	—	—
			2	213	215	223	223	230	245	254	—	—	—	—
			3	39	40	41	42	44	47	51	—	—	—	—
			4 and over	5	6	6	6	6	7	8	—	—	—	—
5	..	{	0	266	255	240	241	224	208	—	—	—	—	—
			1	387	392	394	390	397	389	—	—	—	—	—
			2	265	271	280	280	286	301	—	—	—	—	—
			3	66	68	70	73	76	83	—	—	—	—	—
			4 and over	15	15	16	17	18	19	—	—	—	—	—
6	..	{	0	229	216	202	204	188	—	—	—	—	—	—
			1	348	351	353	346	350	—	—	—	—	—	—
			2	303	309	318	315	320	—	—	—	—	—	—
			3	91	94	97	101	106	—	—	—	—	—	—
			4 and over	28	30	31	33	35	—	—	—	—	—	—
7	..	{	0	203	190	176	179	—	—	—	—	—	—	—
			1	316	317	316	308	—	—	—	—	—	—	—
			2	324	329	339	334	—	—	—	—	—	—	—
			3	113	117	120	126	—	—	—	—	—	—	—
			4 and over	44	46	49	52	—	—	—	—	—	—	—
8	..	{	0	184	173	159	—	—	—	—	—	—	—	—
			1	288	288	286	—	—	—	—	—	—	—	—
			2	336	340	348	—	—	—	—	—	—	—	—
			3	130	135	139	—	—	—	—	—	—	—	—
			4 and over	61	64	68	—	—	—	—	—	—	—	—
9	..	{	0	172	160	—	—	—	—	—	—	—	—	—
			1	267	265	—	—	—	—	—	—	—	—	—
			2	340	342	—	—	—	—	—	—	—	—	—
			3	144	150	—	—	—	—	—	—	—	—	—
			4 and over	77	83	—	—	—	—	—	—	—	—	—
10	..	{	0	163	—	—	—	—	—	—	—	—	—	—
			1	250	—	—	—	—	—	—	—	—	—	—
			2	339	—	—	—	—	—	—	—	—	—	—
			3	155	—	—	—	—	—	—	—	—	—	—
			4 and over	92	—	—	—	—	—	—	—	—	—	—

Table XLVI—continued

(b) Age at marriage—under 20

Duration of marriage (exact years)			Number of liveborn children	Calendar year of marriage										
				1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
0	..	{	0	970	970	970	970	970	970	970	970	970	970	970
			1	28	28	28	28	28	28	28	28	28	28	28
			2	2	2	2	2	2	2	2	2	2	2	2
			3	0	0	0	0	0	0	0	0	0	0	0
			4 and over	1	1	1	1	1	1	1	1	1	1	1
1	..	{	0	544	536	529	541	555	550	553	540	535	507	—
			1	450	458	465	453	439	444	441	454	459	486	—
			2	5	5	5	5	5	5	5	5	5	6	—
			3	0	0	0	0	0	0	0	0	0	0	—
			4 and over	1	1	1	1	1	1	1	1	1	1	—
2	..	{	0	317	309	304	317	325	317	322	314	312	—	—
			1	588	596	602	590	583	587	578	577	578	—	—
			2	92	92	91	90	88	93	97	105	106	—	—
			3	2	2	2	2	2	2	2	2	3	—	—
			4 and over	1	1	1	1	1	1	1	1	1	—	—
3	..	{	0	216	210	202	214	219	213	220	212	—	—	—
			1	536	545	550	540	534	525	510	506	—	—	—
			2	225	222	225	224	223	236	243	253	—	—	—
			3	22	22	22	21	22	25	25	27	—	—	—
			4 and over	2	2	2	2	2	2	2	2	—	—	—
4	..	{	0	154	148	136	151	158	154	159	—	—	—	—
			1	460	468	473	463	454	440	421	—	—	—	—
			2	308	306	313	308	308	322	331	—	—	—	—
			3	70	70	71	70	72	75	80	—	—	—	—
			4 and over	8	8	7	8	8	9	10	—	—	—	—
5	..	{	0	114	106	92	109	122	114	—	—	—	—	—
			1	390	396	399	391	382	368	—	—	—	—	—
			2	354	355	363	353	350	362	—	—	—	—	—
			3	116	116	119	120	118	127	—	—	—	—	—
			4 and over	26	27	27	28	28	30	—	—	—	—	—
6	..	{	0	84	76	63	80	94	—	—	—	—	—	—
			1	334	339	340	332	327	—	—	—	—	—	—
			2	378	378	386	372	363	—	—	—	—	—	—
			3	151	152	154	156	157	—	—	—	—	—	—
			4 and over	54	56	57	59	59	—	—	—	—	—	—
7	..	{	0	62	56	45	62	—	—	—	—	—	—	—
			1	291	295	292	288	—	—	—	—	—	—	—
			2	384	382	394	373	—	—	—	—	—	—	—
			3	178	179	179	184	—	—	—	—	—	—	—
			4 and over	86	88	90	94	—	—	—	—	—	—	—
8	..	{	0	47	41	31	—	—	—	—	—	—	—	—
			1	256	260	259	—	—	—	—	—	—	—	—
			2	383	381	388	—	—	—	—	—	—	—	—
			3	197	197	201	—	—	—	—	—	—	—	—
			4 and over	117	121	121	—	—	—	—	—	—	—	—
9	..	{	0	36	30	—	—	—	—	—	—	—	—	—
			1	232	233	—	—	—	—	—	—	—	—	—
			2	374	372	—	—	—	—	—	—	—	—	—
			3	212	212	—	—	—	—	—	—	—	—	—
			4 and over	146	153	—	—	—	—	—	—	—	—	—
10	..	{	0	28	—	—	—	—	—	—	—	—	—	—
			1	212	—	—	—	—	—	—	—	—	—	—
			2	365	—	—	—	—	—	—	—	—	—	—
			3	221	—	—	—	—	—	—	—	—	—	—
			4 and over	174	—	—	—	—	—	—	—	—	—	—

Table XLVI—continued

(c) Age at marriage 20-24

Duration of marriage (exact years)	Number of liveborn children	Calendar year of marriage										
		1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
0	0	969	969	969	969	969	969	969	969	969	969	969
	1	28	28	28	28	28	28	28	28	28	28	28
	2	2	2	2	2	2	2	2	2	2	2	2
	3	0	0	0	0	0	0	0	0	0	0	0
	4 and over	0	0	0	0	0	0	0	0	0	0	0
1	0	724	720	724	724	713	707	705	698	696	692	—
	1	270	274	270	270	281	288	289	296	298	302	—
	2	5	5	5	5	5	5	5	5	5	6	—
	3	1	1	1	1	1	1	1	1	1	1	—
	4 and over	0	0	0	0	0	0	0	0	0	0	—
2	0	505	499	507	516	495	485	483	476	472	—	—
	1	444	449	442	436	456	463	464	466	467	—	—
	2	48	48	48	46	46	49	50	55	57	—	—
	3	3	2	3	3	2	3	3	3	3	—	—
	4 and over	0	0	0	0	0	0	0	0	0	—	—
3	0	393	388	389	393	369	359	361	348	—	—	—
	1	466	471	465	465	482	481	476	476	—	—	—
	2	129	129	133	130	136	145	148	159	—	—	—
	3	12	12	12	12	12	14	14	16	—	—	—
	4 and over	1	1	1	1	1	1	1	1	—	—	—
4	0	314	307	302	306	284	274	272	—	—	—	—
	1	445	449	446	443	454	447	439	—	—	—	—
	2	204	206	212	211	220	234	241	—	—	—	—
	3	34	34	35	36	36	39	42	—	—	—	—
	4 and over	4	4	4	4	4	5	6	—	—	—	—
5	0	257	247	239	245	226	213	—	—	—	—	—
	1	409	412	410	400	407	398	—	—	—	—	—
	2	263	268	277	277	287	301	—	—	—	—	—
	3	59	61	62	65	66	73	—	—	—	—	—
	4 and over	12	12	13	13	14	15	—	—	—	—	—
6	0	215	203	194	201	183	—	—	—	—	—	—
	1	369	370	369	357	358	—	—	—	—	—	—
	2	308	314	322	321	333	—	—	—	—	—	—
	3	84	87	89	93	97	—	—	—	—	—	—
	4 and over	24	25	26	27	29	—	—	—	—	—	—
7	0	184	172	164	171	—	—	—	—	—	—	—
	1	334	334	330	317	—	—	—	—	—	—	—
	2	336	341	350	348	—	—	—	—	—	—	—
	3	108	113	115	120	—	—	—	—	—	—	—
	4 and over	38	40	42	44	—	—	—	—	—	—	—
8	0	163	152	142	—	—	—	—	—	—	—	—
	1	303	302	297	—	—	—	—	—	—	—	—
	2	353	356	365	—	—	—	—	—	—	—	—
	3	127	134	136	—	—	—	—	—	—	—	—
	4 and over	54	57	60	—	—	—	—	—	—	—	—
9	0	148	137	—	—	—	—	—	—	—	—	—
	1	280	275	—	—	—	—	—	—	—	—	—
	2	360	363	—	—	—	—	—	—	—	—	—
	3	143	151	—	—	—	—	—	—	—	—	—
	4 and over	69	74	—	—	—	—	—	—	—	—	—
10	0	138	—	—	—	—	—	—	—	—	—	—
	1	260	—	—	—	—	—	—	—	—	—	—
	2	361	—	—	—	—	—	—	—	—	—	—
	3	156	—	—	—	—	—	—	—	—	—	—
	4 and over	85	—	—	—	—	—	—	—	—	—	—

Table XLVI—continued

(d) Age at marriage 25-29

Duration of marriage (exact years)			Number of liveborn children	Calendar year of marriage										
				1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
0	..	..	0	955	955	955	955	955	955	955	955	955	955	955
			1	39	39	39	39	39	39	39	39	39	39	39
			2	4	4	4	4	4	4	4	4	4	4	4
			3	1	1	1	1	1	1	1	1	1	1	1
			4 and over	1	1	1	1	1	1	1	1	1	1	1
1	..	..	0	736	735	736	734	711	704	698	688	686	675	—
			1	254	256	254	257	279	286	292	301	302	312	—
			2	7	7	7	7	7	8	8	8	9	9	—
			3	1	1	1	1	2	2	2	1	1	3	—
			4 and over	1	1	1	1	1	1	1	2	1	1	—
2	..	..	0	523	521	523	522	487	480	474	460	455	—	—
			1	428	429	428	429	462	469	472	483	484	—	—
			2	43	43	43	43	44	45	47	50	53	—	—
			3	4	4	4	4	4	4	5	5	6	—	—
			4 and over	2	2	2	2	2	2	2	2	1	—	—
3	..	..	0	414	412	406	396	368	353	350	333	—	—	—
			1	453	455	455	464	489	492	485	491	—	—	—
			2	117	118	123	124	126	137	145	154	—	—	—
			3	12	12	13	13	14	14	16	17	—	—	—
			4 and over	3	3	3	3	3	4	4	4	—	—	—
4	..	..	0	340	336	324	311	286	270	266	—	—	—	—
			1	436	438	441	448	463	461	447	—	—	—	—
			2	187	189	197	202	208	221	235	—	—	—	—
			3	30	31	31	34	36	39	43	—	—	—	—
			4 and over	6	6	7	6	7	9	9	—	—	—	—
5	..	..	0	288	282	265	255	233	216	—	—	—	—	—
			1	403	404	407	406	420	415	—	—	—	—	—
			2	243	248	258	263	269	283	—	—	—	—	—
			3	53	52	55	60	62	67	—	—	—	—	—
			4 and over	14	13	15	15	16	19	—	—	—	—	—
6	..	..	0	250	242	226	218	195	—	—	—	—	—	—
			1	369	372	370	366	376	—	—	—	—	—	—
			2	283	288	297	301	308	—	—	—	—	—	—
			3	75	75	80	87	92	—	—	—	—	—	—
			4 and over	23	24	26	28	28	—	—	—	—	—	—
7	..	..	0	223	215	201	192	—	—	—	—	—	—	—
			1	341	341	338	330	—	—	—	—	—	—	—
			2	306	312	321	324	—	—	—	—	—	—	—
			3	96	96	102	112	—	—	—	—	—	—	—
			4 and over	34	36	38	42	—	—	—	—	—	—	—
8	..	..	0	204	196	183	—	—	—	—	—	—	—	—
			1	318	316	311	—	—	—	—	—	—	—	—
			2	320	325	333	—	—	—	—	—	—	—	—
			3	110	113	120	—	—	—	—	—	—	—	—
			4 and over	47	49	53	—	—	—	—	—	—	—	—
9	..	..	0	191	183	—	—	—	—	—	—	—	—	—
			1	301	297	—	—	—	—	—	—	—	—	—
			2	326	330	—	—	—	—	—	—	—	—	—
			3	122	128	—	—	—	—	—	—	—	—	—
			4 and over	60	63	—	—	—	—	—	—	—	—	—
10	..	..	0	183	—	—	—	—	—	—	—	—	—	—
			1	286	—	—	—	—	—	—	—	—	—	—
			2	328	—	—	—	—	—	—	—	—	—	—
			3	132	—	—	—	—	—	—	—	—	—	—
			4 and over	71	—	—	—	—	—	—	—	—	—	—

Table XLVI—continued

(e) Age at marriage 30-34

Duration of marriage (exact years)			Number of liveborn children	Calendar year of marriage										
				1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
0	..	..	0	945	945	945	945	945	945	945	945	945	945	945
			1	40	40	40	40	40	40	40	40	40	40	40
			2	7	7	7	7	7	7	7	7	7	7	7
			3	6	6	6	6	6	6	6	6	6	6	6
			4 and over	1	1	1	1	1	1	1	1	1	1	1
1	..	..	0	745	736	740	734	719	703	710	707	693	694	—
			1	236	245	240	246	261	276	270	272	285	283	—
			2	11	11	11	11	11	12	10	12	13	12	—
			3	7	7	7	7	7	7	7	7	7	8	—
			4 and over	2	2	2	2	2	2	2	2	2	3	—
2	..	..	0	547	534	540	546	520	501	507	496	486	—	—
			1	397	410	404	400	428	440	434	443	448	—	—
			2	42	43	42	41	39	46	44	48	50	—	—
			3	10	10	10	10	10	9	12	10	11	—	—
			4 and over	3	3	3	3	3	3	3	4	4	—	—
3	..	..	0	461	445	448	448	423	397	410	397	—	—	—
			1	409	422	416	418	437	454	437	442	—	—	—
			2	108	110	113	111	117	124	126	136	—	—	—
			3	17	18	18	18	17	19	20	19	—	—	—
			4 and over	5	5	5	5	5	6	6	7	—	—	—
4	..	..	0	407	388	392	390	369	339	353	—	—	—	—
			1	387	399	395	396	413	425	404	—	—	—	—
			2	163	168	171	170	173	185	190	—	—	—	—
			3	34	35	34	35	36	40	41	—	—	—	—
			4 and over	9	9	8	9	9	11	12	—	—	—	—
5	..	..	0	369	348	352	354	335	304	—	—	—	—	—
			1	361	375	369	365	384	391	—	—	—	—	—
			2	202	209	210	210	205	223	—	—	—	—	—
			3	52	52	53	55	60	63	—	—	—	—	—
			4 and over	16	15	16	17	16	20	—	—	—	—	—
6	..	..	0	341	323	328	331	313	—	—	—	—	—	—
			1	343	350	348	340	357	—	—	—	—	—	—
			2	225	234	231	232	224	—	—	—	—	—	—
			3	67	67	68	71	78	—	—	—	—	—	—
			4 and over	24	25	25	27	28	—	—	—	—	—	—
7	..	..	0	325	308	311	314	—	—	—	—	—	—	—
			1	326	332	334	322	—	—	—	—	—	—	—
			2	236	244	240	244	—	—	—	—	—	—	—
			3	82	82	81	81	—	—	—	—	—	—	—
			4 and over	31	34	35	38	—	—	—	—	—	—	—
8	..	..	0	314	297	301	—	—	—	—	—	—	—	—
			1	313	321	320	—	—	—	—	—	—	—	—
			2	244	249	246	—	—	—	—	—	—	—	—
			3	90	90	88	—	—	—	—	—	—	—	—
			4 and over	39	42	45	—	—	—	—	—	—	—	—
9	..	..	0	308	289	—	—	—	—	—	—	—	—	—
			1	305	313	—	—	—	—	—	—	—	—	—
			2	246	251	—	—	—	—	—	—	—	—	—
			3	96	96	—	—	—	—	—	—	—	—	—
			4 and over	45	51	—	—	—	—	—	—	—	—	—
10	..	..	0	303	—	—	—	—	—	—	—	—	—	—
			1	301	—	—	—	—	—	—	—	—	—	—
			2	248	—	—	—	—	—	—	—	—	—	—
			3	98	—	—	—	—	—	—	—	—	—	—
			4 and over	50	—	—	—	—	—	—	—	—	—	—

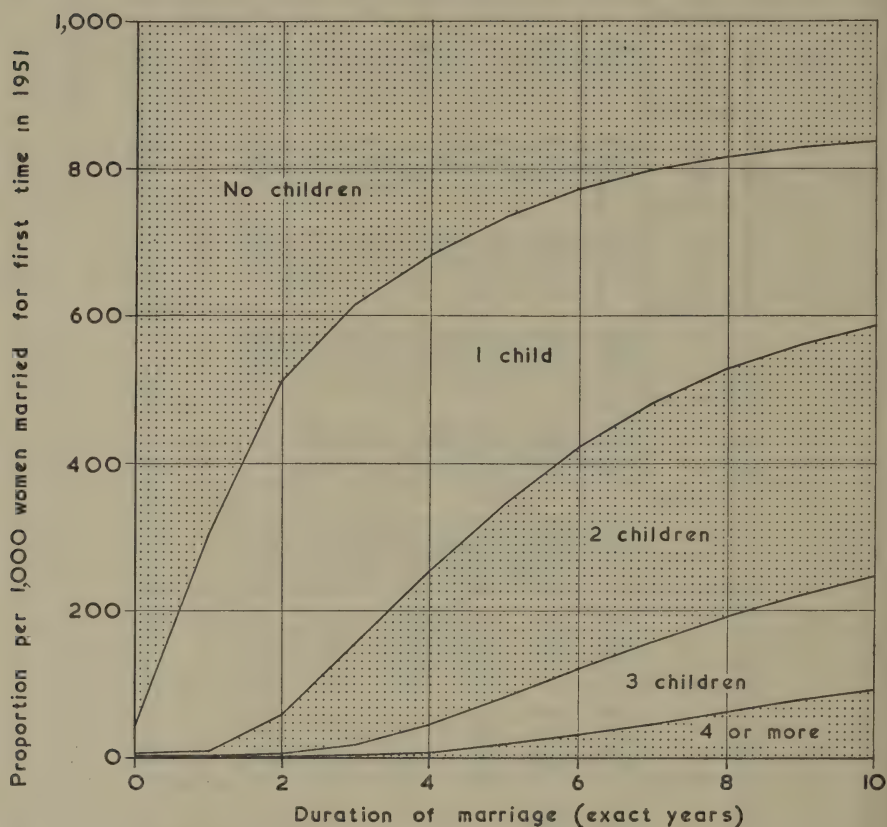
Table XLVI—continued

(f) Age at marriage 35-39

Duration of marriage (exact years)			Number of liveborn children	Calendar year of marriage										
				1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
0	..	..	0	935	935	935	935	935	935	935	935	935	935	935
			1	57	57	57	57	57	57	57	57	57	57	57
			2	0	0	0	0	0	0	0	0	0	0	0
			3	3	3	3	3	3	3	3	3	3	3	3
			4 and over	4	4	4	4	4	4	4	4	4	4	4
1	..	..	0	810	808	796	796	782	776	774	767	761	768	—
			1	179	180	193	193	207	212	214	221	227	219	—
			2	3	4	4	4	4	5	4	4	4	6	—
			3	2	2	2	2	2	2	2	2	2	2	—
			4 and over	5	5	5	5	5	6	5	5	6	6	—
2	..	..	0	680	681	658	660	648	637	636	617	622	—	—
			1	289	288	309	307	323	325	330	348	340	—	—
			2	22	22	24	23	19	29	24	26	26	—	—
			3	3	3	3	3	4	3	3	5	4	—	—
			4 and over	6	6	6	6	6	6	7	6	7	—	—
3	..	..	0	626	630	606	600	590	575	572	561	—	—	—
			1	302	300	322	324	338	338	342	346	—	—	—
			2	58	56	58	62	59	70	67	73	—	—	—
			3	7	7	7	7	6	10	9	12	—	—	—
			4 and over	7	7	7	7	7	7	9	8	—	—	—
4	..	..	0	598	603	575	573	558	546	540	—	—	—	—
			1	295	294	316	313	333	329	332	—	—	—	—
			2	84	81	86	92	85	97	96	—	—	—	—
			3	14	13	14	13	14	18	20	—	—	—	—
			4 and over	9	9	8	9	10	9	12	—	—	—	—
5	..	..	0	582	587	560	558	542	530	—	—	—	—	—
			1	289	289	311	305	325	320	—	—	—	—	—
			2	98	95	98	105	94	111	—	—	—	—	—
			3	20	18	20	20	26	27	—	—	—	—	—
			4 and over	11	11	11	12	13	13	—	—	—	—	—
6	..	..	0	574	578	551	549	535	—	—	—	—	—	—
			1	285	285	305	301	316	—	—	—	—	—	—
			2	101	100	104	110	100	—	—	—	—	—	—
			3	25	23	26	26	34	—	—	—	—	—	—
			4 and over	14	14	14	15	15	—	—	—	—	—	—
7	..	..	0	570	573	548	545	—	—	—	—	—	—	—
			1	282	282	300	296	—	—	—	—	—	—	—
			2	105	102	107	112	—	—	—	—	—	—	—
			3	28	26	28	29	—	—	—	—	—	—	—
			4 and over	15	16	16	18	—	—	—	—	—	—	—
8	..	..	0	568	571	546	—	—	—	—	—	—	—	—
			1	281	281	299	—	—	—	—	—	—	—	—
			2	105	104	107	—	—	—	—	—	—	—	—
			3	30	26	30	—	—	—	—	—	—	—	—
			4 and over	17	18	19	—	—	—	—	—	—	—	—
9	..	..	0	567	570	—	—	—	—	—	—	—	—	—
			1	281	280	—	—	—	—	—	—	—	—	—
			2	104	104	—	—	—	—	—	—	—	—	—
			3	30	26	—	—	—	—	—	—	—	—	—
			4 and over	18	20	—	—	—	—	—	—	—	—	—
10	..	..	0	566	—	—	—	—	—	—	—	—	—	—
			1	280	—	—	—	—	—	—	—	—	—	—
			2	104	—	—	—	—	—	—	—	—	—	—
			3	31	—	—	—	—	—	—	—	—	—	—
			4 and over	18	—	—	—	—	—	—	—	—	—	—

The effect of these changes in terms of the overall family size distribution is illustrated in Diagram 5. In this diagram each line is obtained by cumulating the parity distribution from the high parity end so that, for example, the top line represents the proportion with one or more children, the second line the proportion with two or more children and hence the area in between these two lines shows the proportion with exactly one child.

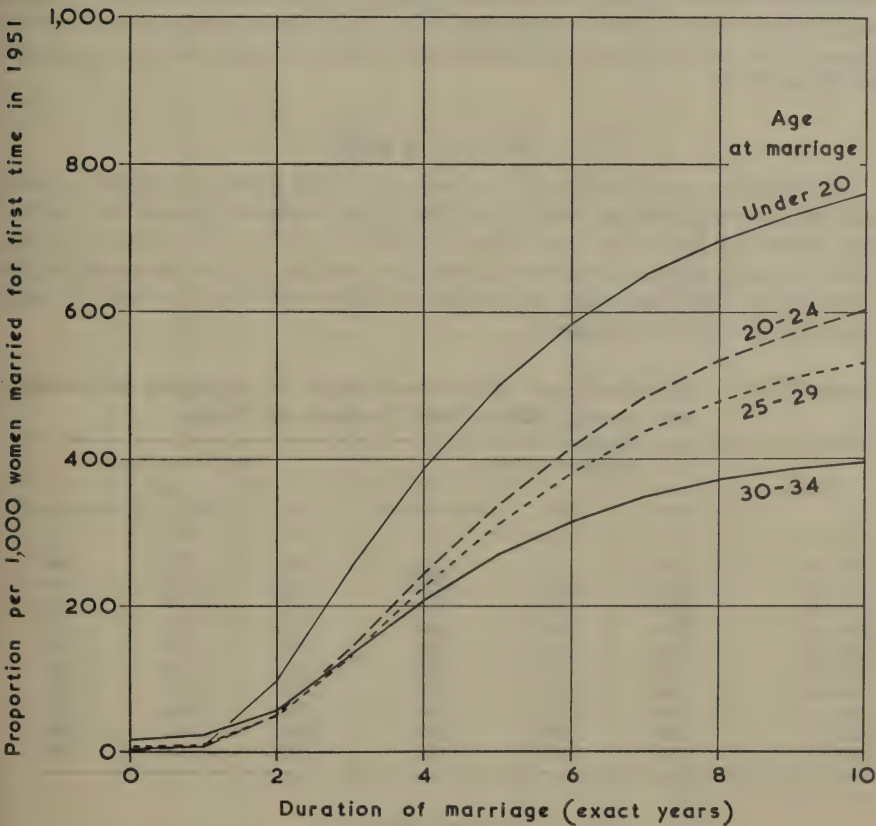
Diagram 5



Proportional family size by duration of marriage; women married for the first time in 1951, all ages under 45, England and Wales

So far the 1951 marriage cohort has been discussed in terms of all women married for the first time under the age of 45. Table XLVI shows that there are differences in the timing of the build-up of family size according to age at marriage. One aspect of this is illustrated in Diagram 6 which compares the proportion with two or more children for each individual age-at-marriage group. Apart from the first year or so of the marriage, the women married under the age of 20 show a clearly higher proportion with two or more children than the other age-at-marriage groups identified. For those married under 20, the proportion reaches 76 per cent by the tenth wedding anniversary. Up to the fourth wedding anniversary the women married at 20–24, 25–29 and 30–34 do not differ very much from each other but thereafter the proportions for the 1951 cohort diverge. However, even by the tenth wedding anniversary 53 per cent of the women married at 25–29 have two or more children, which is relatively close to the 60 per cent for those married at 20–24 and in contrast to the proportion for those married at 30–34 which is rather lower at 40 per cent.

Diagram 6



Proportion of women with two or more children by duration of and age at marriage; women married for the first time in 1951, England and Wales

Table XLVI also indicates the changes in the timing of the build-up of family size for marriage cohorts since 1951 although little can be discerned about the more recent cohorts. Taking all marriage ages together there seems to have been a general acceleration; each successive marriage cohort appears to have built up its family size quicker than the previous one. There is some irregularity in this upward movement but so far the acceleration seems to have been maintained. The 1960 cohort was the first since 1951 to show a rise in the proportion childless at the first wedding anniversary.

There is, however, some variation in this picture when different marriage ages are considered separately. For those married under 20 the 1952 and 1953 cohorts have been very similar to that of 1951 as far as Table XLVI enables them to be followed. This stability appears to have persisted up to and including the 1955 cohort. For the 1956 and later cohorts there seems to have been some acceleration in family building which, as far as can be seen from the very limited evidence for the later cohorts, has continued up to the 1960 cohort. For those married at 20–24 each cohort after 1951 appears to have built up its family faster than the one before it. The 1960 cohort appears to be an exception, but the higher proportion childless at the first wedding anniversary may only be a temporary irregularity. The older age-at-marriage groups also share in the overall picture of acceleration in family building which is apparent in Table XLVI.

Sex ratio at birth

In 1961 there were 1,062 male live births per 1,000 female live births. Serial records are published in Table C of Part II and separate figures for live and still births by legitimacy are shown in Table XLVII. The generally rising trend in the proportion of boys during this century can be attributed to the reduction in foetal mortality in this period. This topic was discussed in more detail in the 1959 Commentary.

Table XLVII. Male births per 1,000 female births, by legitimacy and whether live or still, 1928 to 1961, England and Wales

Period	Legitimate births			Illegitimate births		
	Live	Still	Live and still	Live	Still	Live and still
1928–30 ..	1,044	1,231	1,051	1,037	1,280	1,049
1931–35 ..	1,051	1,207	1,057	1,044	1,153	1,049
1936–40 ..	1,054	1,183	1,059	1,050	1,117	1,054
1941–45 ..	1,061	1,158	1,064	1,074	1,173	1,078
1946–50 ..	1,061	1,169	1,063	1,056	1,238	1,061
1951–55 ..	1,059	1,126	1,060	1,061	1,229	1,066
1956–60 ..	1,060	1,078	1,061	1,055	1,084	1,056
1959 ..	1,063	1,071	1,063	1,069	1,144	1,071
1960 ..	1,061	1,048	1,063	1,048	1,064	1,049
1961 ..	1,062	1,047	1,061	1,063	1,164	1,066

Multiple births

Of the 817,271 maternities in 1961 there were 9,653 with multiple births—9,570 with twins, 82 with triplets and 1 with quadruplets. They produced 18,482 live and 908 stillborn children. Details are given in Tables CC and DD.

Table XLVIII. Multiple birth proportions, 1938 to 1961, England and Wales

		1938-45	1946-50	1951-56	1957-61	1961
Multiple maternities* per 1,000 total maternities	{ All multiple	12.01 ± .05	12.66 ± .06	12.71 ± .06	12.12 ± .06	11.81 ± .12
	Twins ..	11.91 ± .05	12.54 ± .06	12.59 ± .06	12.01 ± .06	11.71 ± .12
	Triplets ..	0.100 ± .004	0.112 ± .005	0.116 ± .005	0.112 ± .005	0.100 ± .011
Multiple births (live and still) per 1,000 total births	{ All multiple	23.84 ± .07	25.11 ± .08	25.21 ± .08	24.06 ± .08	23.44 ± .17
	Twins ..	23.54 ± .07	24.77 ± .08	24.87 ± .08	23.73 ± .08	23.14 ± .17
	Triplets ..	0.295 ± .008	0.333 ± .009	0.344 ± .009	0.332 ± .009	0.297 ± .019
Multiple livebirths per 1,000 liveborn children	{ All multiple	23.00 ± .07	24.28 ± .08	24.39 ± .08	23.43 ± .08	22.78 ± .17
	Twins ..	22.72 ± .07	23.96 ± .08	24.06 ± .08	23.11 ± .08	22.50 ± .17
	Triplets ..	0.272 ± .007	0.311 ± .009	0.328 ± .009	0.316 ± .011	0.281 ± .019
Multiple stillbirths per 1,000 stillborn children	{ All multiple	48.75 ± .55	58.83 ± .78	60.24 ± .79	54.16 ± .82	57.74 ± 1.92
	Twins ..	47.74 ± .54	57.60 ± .77	59.21 ± .79	53.02 ± .81	56.34 ± 1.89
	Triplets ..	0.975 ± .077	1.207 ± .112	1.034 ± .104	1.145 ± .119	1.399 ± .298

* A maternity is treated as multiple whether the children are live or stillborn.

The number of multiple maternities in a single year is too small for detailed study; the figures would be too much affected by chance fluctuations. In the following tables most of the data has been aggregated in groups of years.

Table XLVIII shows the proportions of all maternities and of births (total, live and still) which were multiple, for the periods mid-1938 to end-1945, 1946-50 and 1951-56 and 1957-61 as well as for 1961, together with their standard errors. In the last year 1 in 85 maternities resulted in twins, and 1 in 10,000 in triplets, compared with 1 in 83 and 1 in 8,929 respectively in 1957-61. The proportions are more than twice as high for stillbirths as for livebirths, owing to the higher stillbirth risk in multiple as compared with single maternities.

There was a clear increase in the ratios between 1938-45 and 1946-50. In 1951-55 they rose a little more, but for 1957-61 the proportion of multiples dropped and the proportions for 1961 indicate that the decline continues.

In the following tables, which are too finely sub-divided to use a single year's data, the years 1957-61 have been combined into a single group; but it is as well to remember that it is not really homogeneous.

Age of mother and legitimacy

Table XLIX analyses the incidence of multiple maternities in the periods 1938-45, 1946-50, 1951-56 and 1957-61 by age of mother and legitimacy. The rates increase regularly with age of mother up to age-group 35-39 and then decline again.* For all ages combined the illegitimate rate was significantly smaller than the legitimate in 1938-45, though not thereafter. The all-ages rate is very much affected by the different age distribution of the mothers—the illegitimate rate in 1938-45 standardised on the legitimate age distribution is 13·36, significantly *larger* than the legitimate rate, and the same is true in the later periods; for 1957-61 the illegitimate all-ages rate standardised on the legitimate age distribution is 13·84.

A more detailed study of multiple births must distinguish the different types. Triplets and higher order multiples will be left aside because of their very small numbers and their complexity. Twins are of two types: monozygotic or identical twins arising from the splitting of a fertilized ovum, and dizygotic or fraternal twins arising from the fertilization of two ova in a single menstrual cycle. Monozygotic twins must always be of the same sex, while in the absence of evidence to the contrary the relative frequencies of dizygotic twin pairs consisting respectively of two boys, two girls or a boy and a girl may be expected to follow those deduced from the sex ratio of singly born children. It was shown in Part II of the *Statistical Review* for 1938 (page 121) that the like-sex dizygotic pairs may be taken with sufficient accuracy as equal in number to the unlike-sex pairs, and hence the number of monozygotic pairs estimated by subtracting the number of unlike-sex pairs from the number of like-sex pairs. The figures in Table L have been calculated on this basis.†

* The apparent exception in the location of the peak among illegitimate maternity in 1951-56 is not statistically significant.

† See P. Das Gupta, *Calcutta Statistical Association Bulletin*, Volume 11, No. 43, pp. 98-106 for an alternative method of estimating the proportion of monozygotic and dizygotic twins which has certain theoretical advantages but gives almost identical results.

Table XLIX. Proportion of multiple maternities by age of mother and legitimacy, 1938 to 1961, England and Wales
(Per thousand)

Age at maternity	Legitimate				Illegitimate			
	1938-45	1946-50	1951-56	1957-61	1938-45	1946-50	1951-56	1957-61
All ages	12·06 ± .05	12·68 ± .06	12·71 ± .06	12·13 ± .06	11·34 ± .19	12·31 ± .24	12·78 ± .25	12·07 ± .24
Under 20	6·38 ± .21	6·61 ± .24	6·48 ± .20	6·52 ± .18	5·40 ± .34	5·51 ± .44	4·78 ± .38	6·03 ± .37
20-25	8·54 ± .09	9·00 ± .10	9·18 ± .09	9·08 ± .09	8·49 ± .29	8·92 ± .37	9·29 ± .40	8·89 ± .37
25-30	11·30 ± .09	12·60 ± .10	12·52 ± .10	12·08 ± .10	12·70 ± .43	14·11 ± .50	14·35 ± .58	15·14 ± .62
30-35	14·47 ± .11	15·20 ± .14	16·16 ± .15	15·41 ± .15	17·31 ± .62	16·25 ± .69	20·57 ± .79	17·46 ± .79
35-40	16·83 ± .16	17·55 ± .19	18·57 ± .21	18·03 ± .22	18·53 ± .83	20·68 ± .92	19·50 ± .98	21·80 ± 1·06
40-45	13·14 ± .26	13·32 ± .31	12·45 ± .31	12·74 ± .37	13·40 ± 1·17	13·45 ± 1·32	15·15 ± 1·38	14·38 ± 1·48
45 and over	6·97 ± .66	6·38 ± .80	6·86 ± .89	7·95 ± 1·09	9·13 ± 3·45	10·03 ± 4·09	8·13 ± 3·63	7·63 ± 3·82
Not stated	10·90 ± .72	8·93 ± .89	8·82 ± 1·03	6·84 ± 1·09	10·19 ± 1·55	9·92 ± 2·34	6·03 ± 2·13	8·52 ± 2·69

The table continues the analysis made in the Civil Text volumes for 1940–45 (pages 199 ff.), 1946–50 (page 138) and 1956 (page 37).

Monozygotic Twins

The monozygotic twinning rates are illustrated in Diagram 7. In each of the periods the legitimate rates rose very slightly with mother's age. This does not imply that there is a direct influence of mother's age. It might well be that father's age is the direct cause of this variation, appearing here because of the correlation between parents' ages. The rise was significant in the first and third periods but not in the second and fourth.* In no period did they deviate significantly from a straight line. There were, however, significant differences between the periods. The mean of the fitted line for 1946–50 was higher than that for 1938–45 but the mean for 1957–61 was not significantly different from that for 1951–56 or 1946–50 or even from that for 1938–45. The slopes of the lines are all different from each other, being steepest in 1938–45 and flattest in 1957–61. The illegitimate rates are based on much smaller numbers and are therefore more subject to chance variations; in no period did they deviate significantly from the lines fitted to the legitimate rates.†

Investigation shows that the differences between the periods are not accounted for by the very small differences in the age-distribution of maternities within the five year groups of mother's age.

*

Period	F with 1 and 5 degrees of freedom	P
1938–45	25·06	Less than ·01
1946–50	3·24	·1
1951–56	16·23	·01
1957–61	1·31	More than ·2

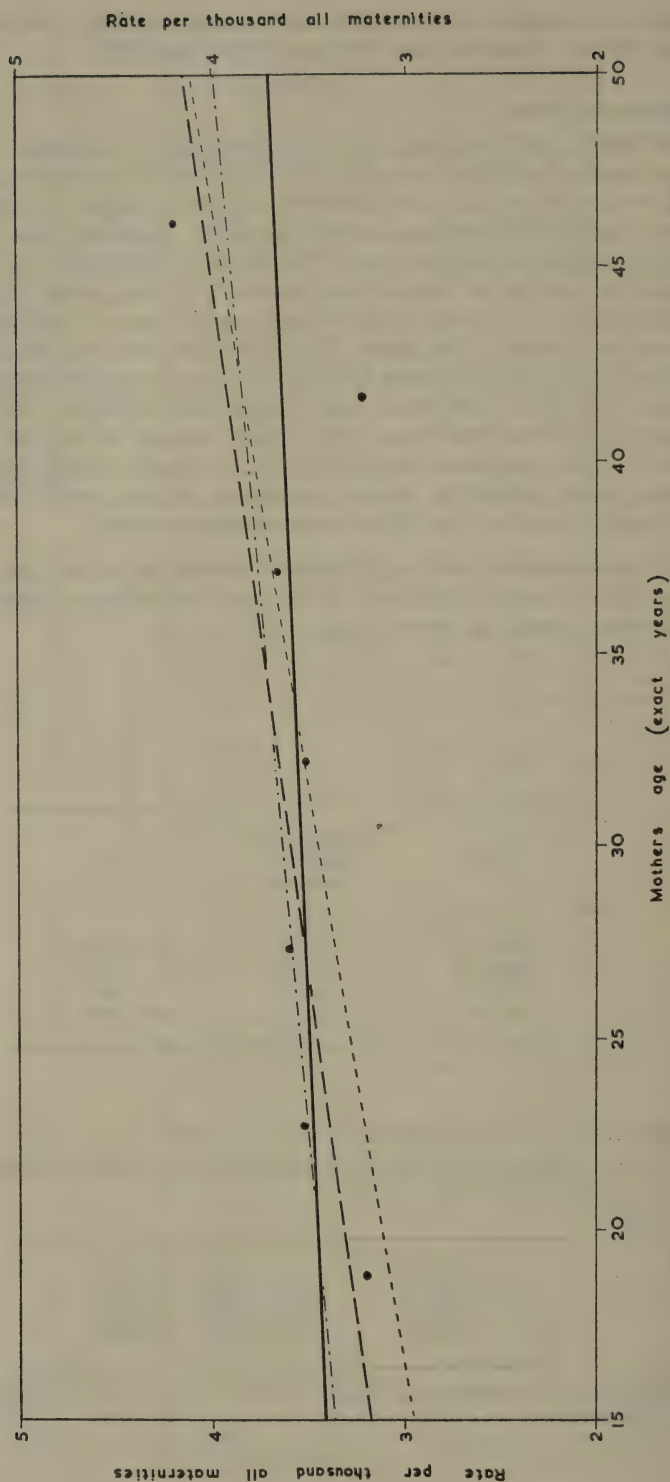
† The equations of the three regression lines are as follows:
 Let y = legitimate monozygotic twin maternity rate per 1,000 total legitimate maternities,
 x = age at maternity in years.
 Then:—

1938–45	$y = 2·4391 + 0·0334x$
1946–50	$y = 3·0757 + 0·0184x$
1951–56	$y = 2·7486 + 0·0279x$
1957–61	$y = 3·2853 + 0·0279x$

The deviations of the illegitimate rates gave χ^2 with 7 d.f. of 8·9, 8·5, 6·8 and 10·7 respectively ($P > \cdot 1$ throughout).

Diagram 7

	1938-45	1946-50	1951-56	1957-61
Actual	-----	-----	-----	-----
Theoretical curve	-----	-----	-----	-----



Legitimate monozygotic twin maternities per 1,000 total legitimate maternities by age of mother, 1938 to 1961, England and Wales

A separate analysis of male and female monozygotic twin rates was made in the Civil Text volumes for 1940–45 (pages 121–123) and 1946–50 (page 139). The male rates were slightly lower than the female. It does not follow that male fertilized ova split less frequently than female, for the incidence of abortion is probably greater among male foetuses and that might cause a deficiency in male twin births even if there is none among conceptions.

Dizygotic Twins

There are about $2\frac{1}{2}$ times as many dizygotic as monozygotic twin maternities. The rates are illustrated in Diagrams 8 and 9. They show that the relationship with mother's age, exhibited by the multiple maternity rates in Table XLVIII, is caused by the incidence of multiple ovulation. The legitimate rates rise in a practically straight line from zero at the age of puberty to a point in the age-group 35–39, apparently near the exact age 38. Then they decline sharply, apparently also in a straight line (the data are rather sparse at these ages), to reach zero again at the menopause.

The theoretical straight lines fitted to the legitimate data have been designed to reach the peak at exact age 38. This point was selected by inspection of the graph for 1938–45, and not by calculating the best fitting point from the data, for that would have made it impossible to use the significance tests employed. It has therefore not been proved that the peak was at the same age in all three periods; but the graphs do not suggest that its position changed very much. The actual rates did not deviate significantly from the theoretical ones in 1938–45 ($\chi^2 = 5.63$ with 4 degrees of freedom, $P \approx .20$) or in 1957–61 ($\chi^2 = 4.00$ with 4 degrees of freedom, $P > .30$), but they did so in the intervening periods (1946–50: $\chi^2 = 29.56$ with 4 d.f., $P < .001$; 1951–56: $\chi^2 = 11.64$ with 4 d.f., $P = .02$), when the theoretical lines nevertheless accounted for practically the whole of the variation of the rates with mother's age.

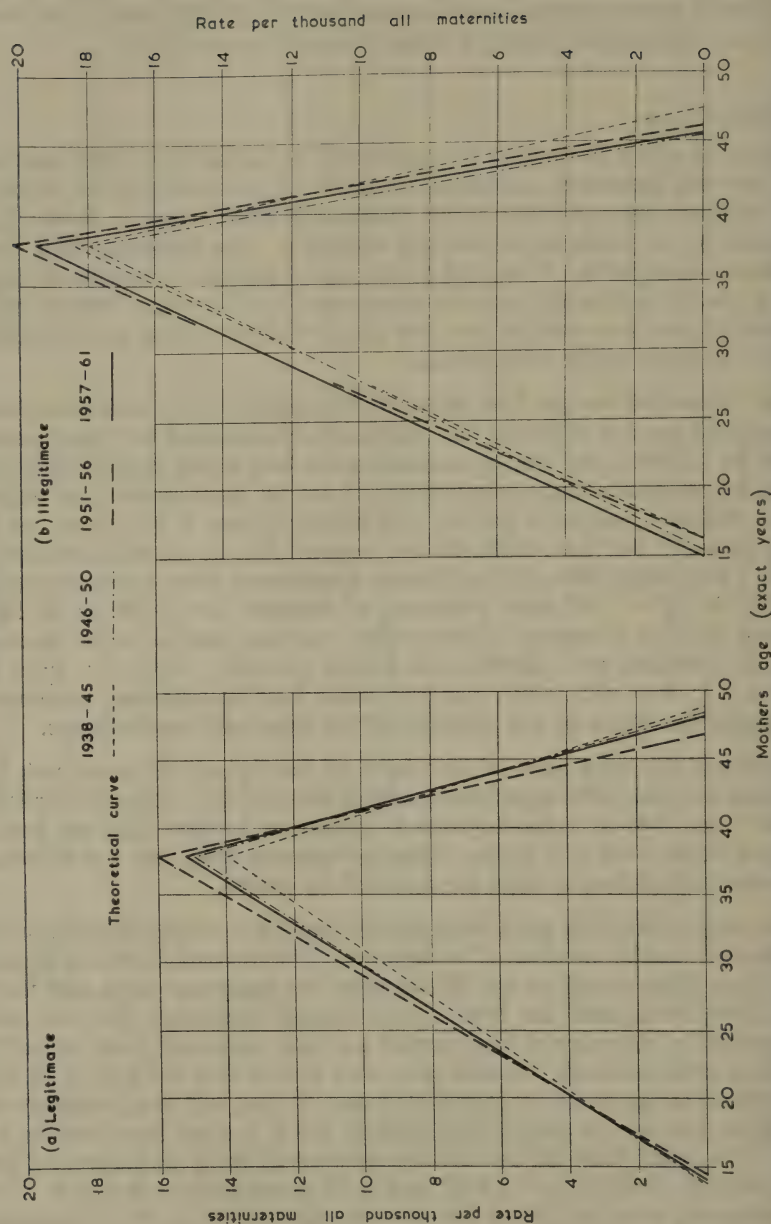
Although the three pairs of lines have all been given the same peak age 38 it is clear that they differ significantly among themselves*; in particular 1938–45 differs from 1946–61 taken together.† Diagram 8 shows that the first three upward slopes were in a regular rising progression with time but this has not been maintained by the slope for the 1957–61 period.

The illegitimate rates suffer from greater liability to chance fluctuation owing to the much smaller numbers of maternities. The theoretical lines in Diagram 8 have been given a peak at age 38 like those for legitimate rates, and the same tests have been used on both. This seemed preferable for the sake of comparability, although at least one of the tests employed is not strictly valid for such small numbers. It does not mean that in fact the peak is at age 38, or at the same age as for the legitimate rates. It may well be at a slightly earlier age in at least one or other of the periods, but it has not been possible to test this. The actual rates did not deviate significantly from the theoretical lines in 1938–45 and 1951–56 ($\chi^2 = 6.02$ and 6.30 respectively with 4 d.f., $P > .10$) and were very close in 1957–61 ($\chi^2 = 0.88$ with 4 d.f., $P = .9$). The deviations were significant in 1946–50 ($\chi^2 = 15.02$ with 4 d.f., $P < .01$), but not as much

* For variation between all four periods, $F = 4.70$ with 9 and 16 d.f., $P < .01$.

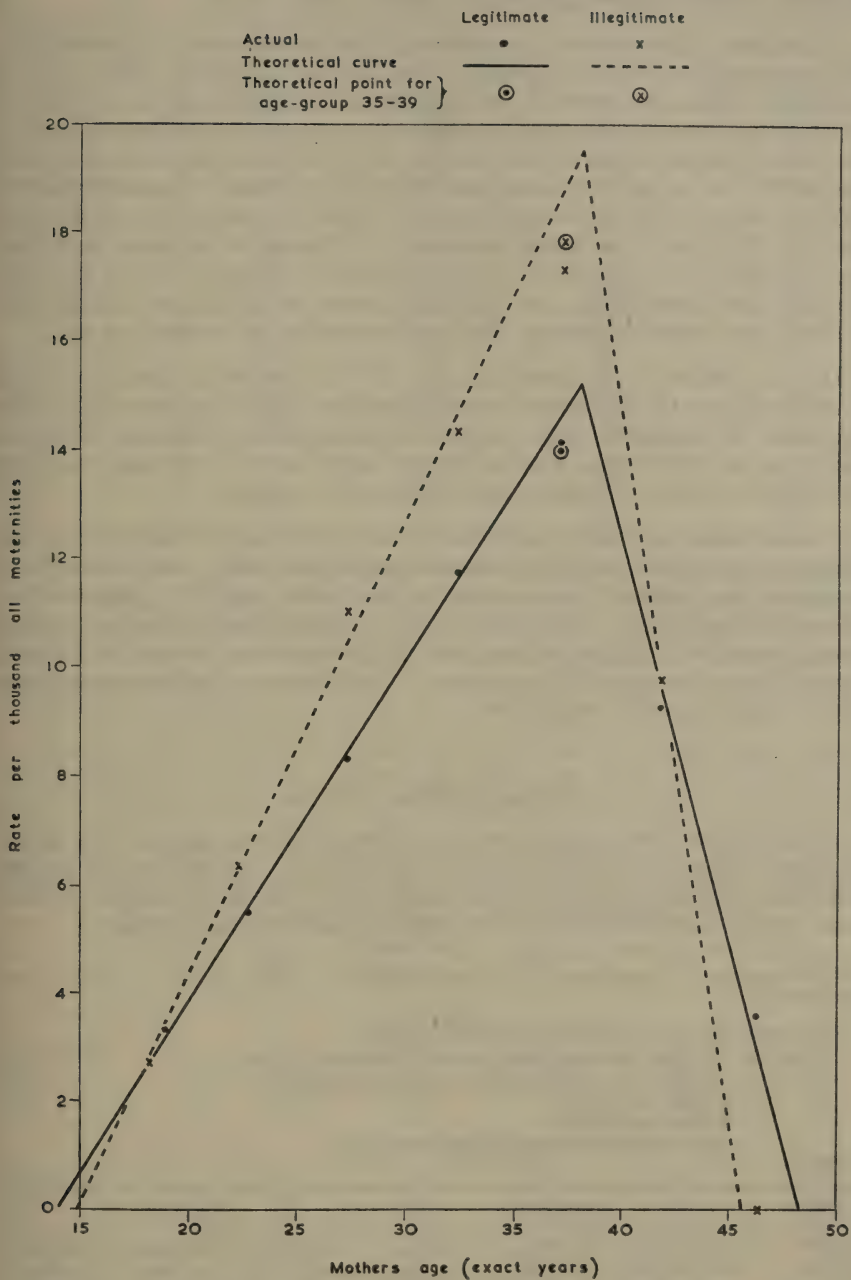
† $F = 9.76$ with 3 and 22 d.f., $P < .01$.

Diagram 8



Dizygotic twin maternities per 1,000 total maternities by age of mother and legitimacy, 1938 to 1961, England and Wales

Diagram 9



Comparison of legitimate and illegitimate dizygotic twin maternity rates, 1957-61, England and Wales

as those of the legitimate rates with their much larger numbers of maternities, and even so the theoretical lines accounted for 95·0 per cent of the total variation of the rates with mother's age.*†

Because the illegitimate data are relatively few the differences in, for instance, the upward slopes of their theoretical lines are not significant. But there are significant differences between the illegitimate and legitimate data. This is certainly true for the period 1938–56 taken as a whole (the difference between the mean upwards slopes of the two sets is 3·5 times its standard error) and also of 1938–45 alone (2·6 times) and 1957–61 (3·8 times). The difference for 1951–56 alone is just about significant (1·9 times its standard error) and that for 1951–56 alone is just about significant (1·9 times) its standard error and that for 1946–50 (0·9 times) is not when taken in isolation, but as the signs are the same throughout—the illegitimate rates increase more steeply with mother's age—these differences also may reasonably be accepted as real.

The comparison is illustrated for the 1957–61 period by Diagram 9. It seems likely that the differences between legitimate and illegitimate data in the age where the theoretical rates are zero are not significant, although it has not been possible to test this. But the steeper slopes of the illegitimate rates and their larger values in the peak age-group are real enough.

It is possible that there is a higher relative frequency of abortion among illegitimate multiple conceptions than among the legitimate, which would tend to depress the maternity rates below the conception rates to a greater extent among the illegitimate. It is plausible that this might occur particularly among young unmarried mothers, causing their multiple maternity rates to be less than those of married women of the same age. But this leaves the higher illegitimate rates at older ages still unexplained.

Seasonal incidence of births

Table LI shows the quarterly pattern of live births since the 1841–50 decade measured by the ratio of the average number of births per day for each quarter compared with daily average for the whole year. The daily average has been used, to allow for differences in the length of quarters and months.

* The regression is significant in all four periods ($P < \cdot 001$, $< \cdot 01$, $< \cdot 001$, $< \cdot 001$ successively).

† The equations of the regression lines are as follows:

Let y = dizygotic twin maternity rate per 1,000 total maternities;

x_1 = 38 minus age at maternity in years (ages under 38),

= 0 (ages over 38);

x_2 = 0 (ages under 38);

= age at maternity minus 38 (ages over 38).

Then:—

Period	Legitimate	Illegitimate
1938–45 ..	$y = 13\cdot9472 - 0\cdot5695x_1 - 1\cdot2832x_2$	$y = 18\cdot4140 - 0\cdot8440x_1 - 1\cdot9414x_2$
1946–50 ..	$y = 14\cdot9509 - 0\cdot6140x_1 - 1\cdot4199x_2$	$y = 17\cdot9326 - 0\cdot7931x_1 - 2\cdot4015x_2$
1951–56 ..	$y = 16\cdot0016 - 0\cdot6740x_1 - 1\cdot7921x_2$	$y = 20\cdot2126 - 0\cdot9264x_1 - 2\cdot4624x_2$
1957–61 ..	$y = 15\cdot2017 - 0\cdot6313x_1 - 1\cdot4843x_2$	$y = 19\cdot5085 - 0\cdot8429x_1 - 2\cdot5498x_2$

The lines were fitted and tested by an application of normal regression theory as developed by S. S. Wilks in *Mathematical Statistics* (Princeton University Press, 1944), Chapter VIII.

Table LI. Quarterly incidence of live births in relation to the average for the calendar year: ratio of quarterly daily average to that of the calendar year taken as 100, 1841 to 1961, England and Wales

Period	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1841-1850 ..	105	103	96	96
1851-1860 ..	105	104	96	95
1861-1870 ..	104	103	97	96
1871-1880 ..	103	102	98	97
1881-1890 ..	103	102	98	97
1891-1900 ..	102	102	99	97
1901-1910 ..	102	103	100	95
1911-1920 ..	103	102	99	96
1921-1930 ..	102	105	100	93
1931-1935 ..	101	106	101	92
1936-1940 ..	100	106	102	92
1941-1945 ..	100	104	99	97
1946-1950 ..	103	104	99	94
1951-1955 ..	103	105	99	93
1956-1960 ..	102	103	99	96
1959	105	104	98	93
1960	101	103	100	96
1961	102	103	100	96

There has been little change in the seasonal pattern over the period shown in Table LI. The first half of the year has normally accounted for a few per cent more than the average daily births for the whole year and the second half of the year for correspondingly less. Since the beginning of this century the average daily number of births has usually been highest in the second quarter of the year and lowest in the last quarter.

The quarterly incidence of births for recent years distinguishing legitimate and illegitimate live births is shown in Table LII. This table demonstrates that the quarterly pattern is similar for legitimate and illegitimate live births.

Table LII. Quarterly live birth incidence in relation to the average for the calendar year: ratio of quarterly daily average to that of the calendar year taken as 100, 1939, 1951-55, 1959 to 1961, England and Wales

	1939	1951-55 average	1959	1960	1961
All live births					
1st Quarter	101	103	105	101	102
2nd " " " "	107	105	104	103	103
3rd " " " "	100	99	98	100	100
4th " " " "	92	93	93	96	96
Legitimate live births					
1st Quarter	101	103	105	101	102
2nd " " " "	106	105	104	103	103
3rd " " " "	100	99	98	100	100
4th " " " "	93	93	93	96	96
Illegitimate live births					
1st Quarter	106	104	103	97	97
2nd " " " "	108	107	104	103	101
3rd " " " "	99	98	99	101	101
4th " " " "	87	91	94	99	101

The monthly birth figures in Table TT allow a more detailed study. The ratios of the daily averages in each month to those for the calendar year are contained in Table LIII for some recent years.

Table LIII. Monthly birth incidence in relation to the average for the calendar year, 1939, 1951-55, 1956-60, 1960 and 1961, England and Wales

Month of occurrence	Ratio of monthly daily average to that of the calendar year taken as 1,000									
	Legitimate live births					Illegitimate live births				
	1939	1951-55	1956-60	1960	1961	1939	1951-55	1956-60	1960	1961
January ..	980	994	986	953	986	1,076	998	975	917	947
February ..	995	1,030	1,033	1,036	1,009	1,041	1,049	1,026	1,017	953
March ..	1,041	1,063	1,071	1,057	1,062	1,080	1,074	1,036	994	1,008
April ..	1,073	1,056	1,047	1,022	1,036	1,046	1,078	1,036	1,007	1,030
May ..	1,078	1,065	1,046	1,043	1,030	1,138	1,084	1,044	1,050	1,008
June ..	1,043	1,035	1,009	1,015	1,014	1,044	1,056	1,026	1,019	992
July ..	1,025	1,009	985	1,004	999	1,038	1,020	988	1,028	1,008
August ..	985	968	963	970	987	960	941	968	976	998
September ..	1,004	991	1,005	1,015	1,007	969	970	1,009	1,026	1,015
October ..	939	936	967	974	967	859	890	966	1,004	977
November ..	914	913	934	956	931	853	900	949	976	985
December ..	927	941	956	959	972	889	950	985	988	1,060

For live births Table LIII shows that the daily average is normally at a minimum in November, rises sharply until March, remains high until May or June and then declines again except for a minor rise in September (corresponding to December conceptions).

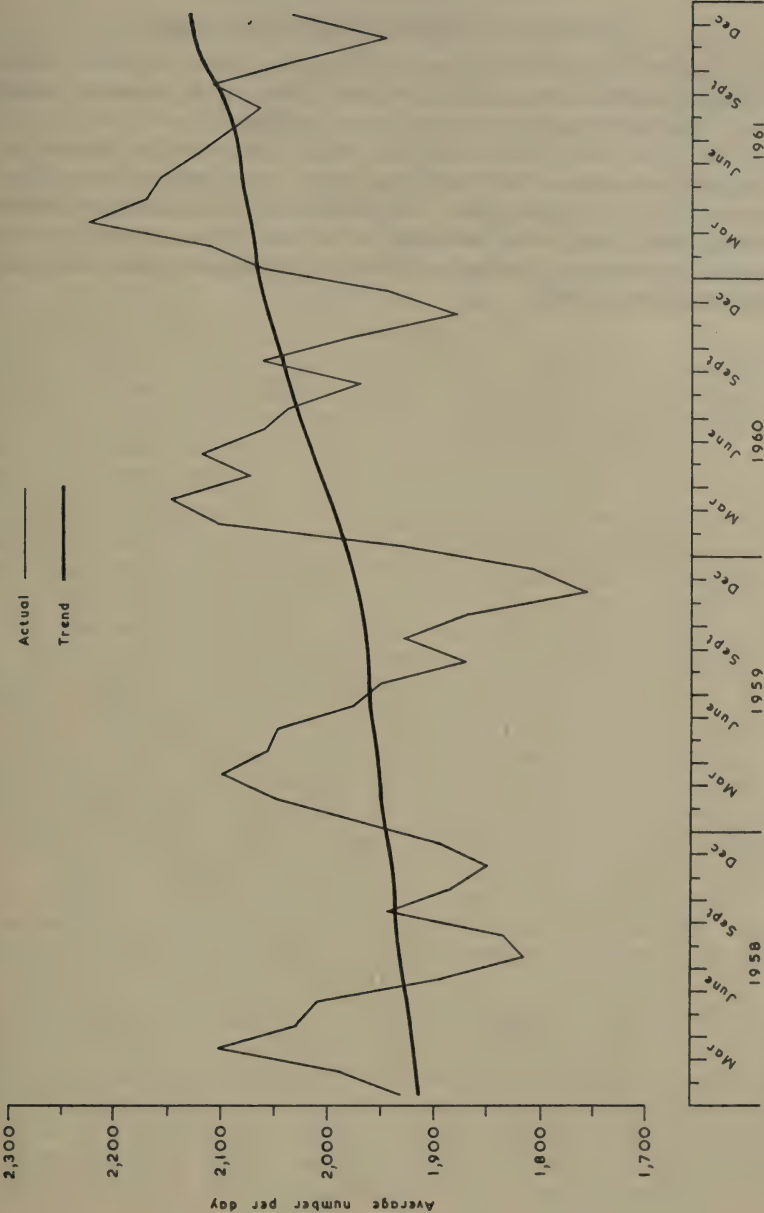
The seasonal pattern of ratios to the calendar year average such as those shown in Table LIII is disturbed if the trend of birth is not constant. Such distortion can be eliminated by relating the average daily number of births for the month, not to the average for the year, but to the trend value for that particular month. This comparison has been made for the period since 1958 and the results are shown in Table LIV and illustrated in Diagram 10.

Table LIV. Monthly incidence of legitimate live births in relation to the trend, 1958 to 1961, England and Wales

The ratios were calculated before rounding off the mean numbers

Month of occurrence		Mean number of legitimate live births per day								Ratio of actual to trend value			
		Actual				Trend							
		1958	1959	1960	1961	1958	1959	1960	1961	1958	1959	1960	1961
January ..	..	1,933	1,972	1,932	2,060	1,914	1,946	1,981	2,064	1.010	1.013	0.975	0.998
February ..	..	1,987	2,050	2,101	2,108	1,917	1,948	1,988	2,067	1.036	1.052	1.056	1.020
March ..	..	2,103	2,095	2,143	2,220	1,920	1,951	1,996	2,070	1.095	1.074	1.074	1.072
April ..	..	2,028	2,055	2,072	2,166	1,923	1,953	2,003	2,074	1.055	1.052	1.035	1.044
May ..	..	2,010	2,044	2,115	2,153	1,926	1,955	2,011	2,077	1.043	1.046	1.052	1.037
June ..	..	1,891	1,974	2,058	2,119	1,930	1,958	2,018	2,080	0.980	1.008	1.020	1.019
July ..	..	1,815	1,949	2,035	2,087	1,933	1,960	2,025	2,085	0.939	0.994	1.005	1.001
August ..	..	1,835	1,868	1,967	2,062	1,935	1,961	2,033	2,092	0.948	0.953	0.968	0.986
September ..	..	1,942	1,927	2,059	2,104	1,937	1,963	2,040	2,102	1.003	0.982	1.009	1.001
October ..	..	1,883	1,866	1,976	2,022	1,939	1,966	2,047	2,114	0.971	0.949	0.965	0.956
November ..	..	1,848	1,755	1,877	1,945	1,941	1,970	2,055	2,123	0.952	0.891	0.913	0.916
December ..	..	1,893	1,807	1,945	2,032	1,944	1,975	2,060	2,127	0.974	0.915	0.944	0.955

Diagram 10



Monthly incidence of legitimate live births in relation to the trend, 1958 to 1961, England and Wales

When seasonal variation has been eliminated it can be seen that there was an upward trend throughout the whole of this period. The trend rose more steeply in the second half of 1961 than in the first part of the year.

Birth rates in different parts of the country

The numbers of live births by sex and legitimacy and the crude birth rates for all administrative areas in England and Wales with summary figures for regions, conurbations and urban and rural aggregates are shown in Table E of Part II. This table also includes an Area Comparability Factor for each area by which the crude birth rates can be standardised for the sex and age structure of the local population. The ratio of the local rate thus adjusted to the national birth rate is also published in Table E. Comparison of birth rates in regions, conurbations and urban and rural aggregates appeared in the 1959 Commentary (pp. 65-68).

GENERAL MORTALITY

The crude death rates per thousand living for the year 1961 were: 12·0 for all persons, 12·6 for males and 11·4 for females. These are the highest since 1951 and the excess is mainly due to an outbreak of influenza in the early part of the year. However, there have been important changes in the age structure of the population since 1951 which can be allowed for by the use of the Standardised Mortality Ratio (S.M.R.) and if this is done the difference is much less striking. Table LX shows these S.M.Rs. for all causes and for certain selected conditions, and it can be seen that the 1961 mortality though high compared with 1960, which was a year of low mortality, does not differ greatly from the years 1952–59. There has been an erratic downward trend during this period, but on the whole the changes are small.

The total deaths in the year were 551,752 and of these 73,104 were ascribed to respiratory disease (ICD Nos. 470–527). The excess over 1960 amounted to 25,484 and of these 16,149 (about 63 per cent) were accounted for by respiratory disease alone. Apart from this the general pattern of mortality shows little change from recent years.

The largest proportional increase among the respiratory diseases was in the deaths certified as due to influenza. The S.M.R. for this condition rose from 13, its lowest value since 1952, to 86; in absolute figures the deaths rose by a factor of nearly seven from 1,098 to 7,102. The proportional increase in other respiratory disease was considerably less though the absolute numbers were large. It seems likely that the influenza virus, probably of type A, was specifically responsible for much of the excess mortality in 1961.

A number of the diseases whose S.M.Rs. are given in Table LX show only very small changes from 1960. The most notable exception in this respect is diabetes mellitus (ICD No. 260) in males, whose S.M.R. has increased from 93 to 103, its highest value since 1952. There was a smaller rise among females. In the males, the current rise was almost entirely due to mortality at ages 75 and over. It seems probable that this increase was associated with the influenza epidemic since the difference between the two years was most marked in the first quarter of the year. However, there have been several outbreaks of influenza in the previous ten years none of which was associated with such a large increase in diabetes mortality.

The only category showing a well defined decrease was leukaemia and aleukaemia (ICD No. 204) in males, whose S.M.R. declined from 134 to 126. This decline seems to be part of a recent trend in the disease whose S.M.R. in males rose very sharply to 134 in 1960 after an irregular increase since 1951. The decline in 1961 relative to 1960 represents a return towards the average. There seems to be no obvious explanation for the sudden increase in 1960, which was preceded, in 1959, by a similar sharp rise among females.

Notifiable diseases

Measles was epidemic in 1961 and constituted the largest body of notified illness. There were 763,531 notifications, the next most frequent being whooping cough (24,470), dysentery (20,418) and scarlet fever (19,990).

The measles epidemic was a large one and the number of notifications the highest since 1951. The scarlet fever and whooping cough notifications on the other hand were the lowest since that year.

Dysentery has fluctuated irregularly round a yearly level of about 35,000 cases since 1954 and 1961 was rather a low year possibly because the susceptible population had been reduced by a high incidence in 1960.

The downward trend in poliomyelitis was interrupted in 1961, there being 707 paralytic cases compared with 257 in 1960.

Deaths from tuberculosis continued to decline as a whole, though in women, where the rates are now small, the decrease was somewhat erratic in the individual age-groups. The male death rates are falling most markedly at ages 55 and older while the notifications are decreasing more at younger ages.

Cancer

Lung cancer continues to increase in both males and females, and in 1961 made up about a third of all cancer deaths in the male. There is now some evidence that the rate of increase in men is slackening off; the yearly increases in the S.M.Rs. for males and females is given below, for the years 1952-1961.

	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Males	6	7	8	6	5	5	4	7	4	3
Females	6	-1	3	4	4	3	3	3	8	8

It can be seen that, apart from a sudden rise in 1959, the rate of increase in males has been slowly falling off for the last ten years. The corresponding curve for females, after a period in which the rate of increase was fairly steady between 1954 and 1959 has now accelerated sharply, though it is too early as yet to say whether this is a temporary phenomenon or not.

Cancer of other organs has shown little change in recent years. In males the major source of cancer mortality other than lung cancer, is cancer of the digestive organs which causes about one-third of the whole. This group of neoplasms has been slowly declining and the fall was maintained in 1961. Of the individual types within it the major ones were cancers of stomach, large intestine and rectum, all of which have been decreasing. However, cancer of the pancreas has shown an irregular rise since 1951, rather more marked in males than females. As this is a fairly easily recognised form of cancer, it seems likely that this increase is genuine.

Diseases of circulatory system

Since 1952 the S.M.R. for these diseases (ICD Nos. 400-468) has been stationary in males, but has declined very slightly in females. The major components of this group are diseases classified as arteriosclerotic and degenerative heart disease which account for about two-thirds to three-quarters of the total

deaths: and among these the mortality ascribed to coronary disease has risen steadily. This rise in coronary disease has been compensated by a corresponding decline in the deaths ascribed to myocardial degeneration.

There was a sharp rise in the S.M.R. for diseases of veins and other diseases of circulatory system (ICD Nos. 460-8) between 1960 and 1961. This increased from 164 to 180 in males and 160 to 182 in females. The increase may have been partly due to excess mortality associated with the influenza epidemic but it is worth noting that there has been a consistent increase in the S.M.Rs. for males and females for this group since 1952. Most of the recent rise was concentrated in pulmonary embolism and infarction, and other venous embolism and thrombosis (ICD Nos. 465, 466).

Infant mortality

The total infant mortality rate shown in Table LXIV continues to fall though the rate of decline is now very slow: since 1958 it has decreased steadily by 0·4 per annum, but this small advance nevertheless represents about 2-300 lives saved every year. This saving is scattered fairly evenly over the Early, Late and Post-neonatal periods in all of which the rates are decreasing by about 0·1 every year. Decrements of this size are of about the same order as the variations expected from chance effects alone and it is dangerous to draw conclusions about trends unless they have been fairly consistent for a number of years. As far as the rates in Table LXIV are concerned, there is little reason to believe that the rates at under one day, or after three months of age have been declining at all during the years 1957-61, the decrease in infant mortality being concentrated into the period from one day to three months after birth.

The stillbirth rate is also decreasing, the rate of decrease having remained at about 1·0 per 1,000 for the last five years, as can be seen in table LXV.

Some comparisons of the trend of infant mortality in various regions from 1956 to 61 are given in Table LXXI. The large differences between the South of England and the remainder of the country show some slight signs of diminishing in the neonatal period as mortality is virtually stationary in the South and East but still decreasing slightly in the other regions. Regional differences in post-neonatal mortality on the other hand virtually showed no signs of diminishing.

Maternal mortality

There were 220 deaths from causes associated with pregnancy and childbirth other than abortion in 1961, and a further 54 ascribed to abortion. The rate per 100,000 live births declined for both these groups from 31 to 27, and from 8 to 7 respectively. Over the years 1957-61 there has been a steady decrease in the total rate of maternal mortality due to causes other than abortion but the numbers of deaths in the individual categories shown in Table LXXII are now so small that it is difficult to pick out any one as being mainly concerned. Deaths due to abortion of all forms show no significant decline at all in this period.

Road accidents

One of the largest single causes of death in men aged 15-24 remains motor vehicle traffic accidents which account for about 40 per cent of the total mortality in this group. This cause has been increasing for some years but the

rate of increase appears to be slowing up and in 1961 the rate was slightly lower than in 1960. The rate among women of this age is considerably smaller though it has also been rising in recent years.

About two-thirds of deaths among the men of this age-group are due to motor cycle accidents, in which they are riders or passengers. The main causes of death are fractures of the skull, and internal injuries of the chest, abdomen and pelvis. In women of the same age-group the fatal accidents occur most frequently as a result of accidents in which they were not involved as riders or passengers on a motor cycle, though about one-third of them arise in this way.

Table LV. Crude annual death rates per 1,000 living, and Standardised Mortality Ratios, 1841 to 1961, England and Wales

Period	Crude death rate per 1,000 living		Standardised Mortality Ratio* (1950-52 = 100)	
	Males	Females	Males	Females
1841-1850	23.1	21.6	320	396
1851-1860	23.1	21.4	313	384
1861-1870	23.7	21.4	319	383
1871-1880	22.7	20.1	308	362
1881-1890	20.3	18.1	281	327
1891-1900	19.3	17.1	268	307
1901-1910	16.4	14.4	221	248
1911-1920	15.1	13.0	187	207
1921-1930	12.9	11.4	142	159
1931-1940	13.0	11.5	125	136
1941-1950	12.5	10.9	104	107
1951-1960	12.3	10.9	96	92
1941	14.0	11.8	124	127
1942	12.5	10.5	109	111
1943	12.7	11.1	109	114
1944	12.6	10.7	106	108
1945	12.3	10.7	103	106
1946	12.2	10.9	101	106
1947	12.9	11.2	106	108
1948	11.5	10.1	93	95
1949	12.3	11.1	99	103
1950	12.3	11.0	98	101
1951	13.4	11.8	106	106
1952	12.2	10.5	96	93
1953	12.2	10.7	96	94
1954	12.2	10.5	95	91
1955	12.5	10.9	97	93
1956	12.5	10.9	96	92
1957	12.3	10.7	94	88
1958	12.4	11.0	95	90
1959	12.3	11.0	94	89
1960	12.2	10.9	92	87
1961	12.6	11.4	95	90

* Civilians only, 1914-1918 and 1939-1949.

Table LVI. Abridged life table, 1959-61, England and Wales

Males		Age x	Females	
l_x	$^{\circ}e_x$		l_x	$^{\circ}e_x$
10,000	68·1	0	10,000	73·9
9,757	68·8	1	9,808	74·3
9,741	67·9	2	9,796	73·4
9,731	67·0	3	9,788	72·5
9,724	66·0	4	9,782	71·5
9,718	65·1	5	9,777	70·6
9,694	60·2	10	9,761	65·7
9,675	55·3	15	9,748	60·8
9,631	50·6	20	9,729	55·9
9,576	45·9	25	9,706	51·0
9,526	41·1	30	9,676	46·2
9,468	36·3	35	9,633	41·4
9,379	31·7	40	9,568	36·6
9,239	27·1	45	9,463	32·0
9,003	22·7	50	9,302	27·5
8,593	18·7	55	9,057	23·2
7,895	15·1	60	8,695	19·1
6,862	12·0	65	8,124	15·2
5,523	9·4	70	7,250	11·7
3,931	7·1	75	5,944	8·8
2,328	5·3	80	4,202	6·4
995	4·1	85	2,316	4·5

This abridged life table is constructed from the estimated *home* population in 1959, 1960 and 1961, and the total deaths registered in those years.

The column headed l_x shows, for each sex, the numbers who would survive to exact age x out of 10,000 born who were subject throughout their lives to the recorded age death rates of the period.

Column $^{\circ}e_x$ is the "expectation of life", that is, the average future lifetime which would be lived by persons aged exactly x , if likewise subject to those death rates.

**Table LVII. Expectation of life at birth and at age 1 year, 1838 to 1961,
England and Wales**

From English Life Table			Year	Expectation of life at			
				Birth		Age 1 year	
				Males	Females	Males	Females
No. 1	..	..	1841	40	42	47	48
2	..	..	1838-44	40	42	47	47
3	..	..	1838-54	40	42	47	47
4	..	..	1871-80	41	45	48	50
5	..	..	1881-90	44	47	51	53
6	..	..	1891-1900	44	48	52	55
7	..	..	1901-10	49	52	56	58
8	..	..	1910-12	52	55	58	60
9	..	..	1920-22	56	60	60	63
10	..	..	1930-32	59	63	62	65
11	..	..	1950-52	66	72	68	72
From annual Abridged Life Tables			1943	62	67	64	69
			1944	62	68	64	70
			1945	63	69	65	71
			1946	65	69	67	71
			1947	64	69	67	71
			1948	66	71	68	72
			1949	66	71	68	72
			1950	67	71	68	72
			1951	66	71	67	72
			1952	67	72	68	73
			1953	67	72	68	73
			1954	68	73	69	74
			1955	68	73	68	74
			1956	68	73	69	74
			1957	68	74	69	74
			1958	68	74	69	74
			1959	68	74	69	74
			1960	68	74	69	75
			1961	68	74	69	74

Table LVIII. Annual death rates per 1,000 living, by quarters in each year 1931 to 1961, with ratios to each yearly rate taken as 100, England and Wales

	Death rate per 1,000 living				Ratio to yearly rate taken as 100			
	March	June	Septem- ber	Decem- ber	March	June	Septem- ber	Decem- ber
1931	16.5	11.5	9.6	11.7	134	93	78	95
1932	15.4	11.6	9.7	11.5	128	97	81	96
1933	17.1	10.8	9.4	12.0	139	88	76	98
1934	14.6	11.8	9.6	11.2	124	100	81	95
1935	13.2	12.0	9.8	12.0	113	103	84	103
1936	15.1	11.8	9.7	12.0	125	98	80	99
1937	16.2	11.6	9.7	12.3	131	94	78	99
1938	13.6	11.6	9.9	11.5	117	100	85	99
1939	15.1	11.7	9.9	11.8	125	97	82	98
1940	20.6	11.9	10.8	14.1	143	83	75	98
1941	18.4	14.2	10.1	11.5	136	105	75	85
1942	15.8	12.0	9.8	11.6	128	98	80	94
1943	14.5	11.7	10.1	15.7	112	90	78	121
1944	15.3	12.0	11.0	12.7	120	94	87	100
1945	16.5	11.5	10.0	12.6	131	91	79	100
1946	15.4	11.2	9.7	11.9	128	93	81	99
1947	17.6	11.3	9.2	11.4	143	92	75	93
1948	12.4	10.3	9.4	11.7	113	94	85	106
1949	15.2	11.2	9.3	11.8	129	95	79	100
1950	14.0	11.1	9.3	12.3	120	95	80	106
1951	19.1	11.1	9.1	11.0	153	89	73	88
1952	13.4	10.6	8.9	12.4	119	94	79	110
1953	15.8	10.4	8.9	10.7	139	91	78	94
1954	14.0	10.6	9.3	11.4	124	94	82	101
1955	15.4	11.2	9.1	11.1	132	96	78	95
1956	15.3	10.8	9.3	11.3	131	92	79	97
1957	12.2	10.6	9.7	13.4	106	92	84	117
1958	14.7	11.0	9.3	11.7	126	94	79	100
1959	15.8	10.6	9.0	11.1	136	91	78	96
1960	13.1	10.9	9.8	12.2	114	95	85	106
1961	15.6	10.9	9.5	11.9	130	91	79	99

Table LIX. Average annual death rates per 1,000 living, by sex and age, 1841 to 1961, England and Wales

	Males								Females									
	All ages	0*	1-	5-	15-	25-	45-	65-	85 and over	All ages	0*	1-	5-	15-	25-	45-	65-	85 and over
1841-1850	23.1	167	7.24	8.23	11.2	23.6	89.6	312.3	21.6	137			7.27	8.50	11.6	21.1	82.4	293.3
1851-1860	23.1	168	6.79	7.71	10.9	23.2	86.8	308.2	21.4	139			6.84	7.98	10.9	20.1	80.0	288.9
1861-1870	23.7	168	6.43	7.26	11.5	24.8	87.7	315.0	21.4	139			6.25	7.30	10.7	20.6	79.8	285.1
1871-1880	22.7	163	5.29	6.24	11.3	26.1	90.2	327.4	20.1	134			5.05	6.12	9.92	21.0	80.9	296.4
1881-1890	20.3	155	4.20	4.97	9.79	25.5	89.4	305.8	18.1	128			4.23	4.97	8.76	20.6	78.9	270.8
1891-1900	19.3	168	3.40	4.38	8.82	25.2	89.4	286.8	17.1	138			3.49	4.06	7.58	20.3	79.5	261.4
1901-1910	16.4	140	2.80	3.61	7.16	22.3	82.7	279.2	14.4	114			2.91	3.20	5.60	17.5	71.6	250.3
1911-1920	15.1	112	2.93	4.16	7.05	20.2	81.4	274.5	13.0	89			2.97	3.53	5.54	15.2	67.6	243.6
1921-1925	12.9	86	2.10	3.06	5.24	16.9	76.2	272.7	11.4	66			2.05	2.83	4.26	12.8	64.0	241.2
1926-1930	12.9	77	2.06	2.93	4.84	17.0	76.3	298.1	11.4	59			1.90	2.67	3.97	12.4	62.5	254.4
1931-1935	12.7	70	6.88	1.84	4.23	16.6	75.1	278.9	11.4	54	6.23		1.71	2.51	3.67	11.9	61.0	245.0
1936-1940	13.3	62	5.00	1.60	2.64	3.95	76.2	286.3	11.6	48	4.40		1.40	2.17	3.22	11.5	60.1	252.7
1941-1945	12.8	56	3.72	1.44	2.99	3.72	69.0	226.1	10.9	44	3.26		1.13	1.98	2.84	9.86	52.6	206.6
1946-1950	12.2	41	1.90	0.79	1.42	2.58	69.9	241.6	10.9	32	1.62		0.59	1.29	2.17	8.79	52.1	208.9
1951-1955	12.5	30	1.23	0.52	1.05	2.05	75.5	265.9	10.9	23	1.04		0.37	0.60	1.60	8.02	51.9	222.0
1956-1960	12.3	25	0.99	0.44	1.00	1.82	74.1	239.2	10.9	20	0.82		0.30	0.45	1.34	7.43	49.4	212.5
1956	12.5	27	0.98	0.43	0.93	1.85	75.8	256.2	10.9	20	0.83		0.30	0.45	1.40	7.55	51.0	222.7
1957	12.3	26	1.04	0.46	1.03	1.86	73.5	226.8	10.7	20	0.90		0.32	0.49	1.41	7.59	48.7	199.2
1958	12.4	25	0.99	0.44	0.95	1.81	73.5	242.6	11.0	20	0.77		0.27	0.45	1.32	7.45	49.9	215.6
1959	12.3	25	1.00	0.43	1.03	1.79	73.9	240.0	11.0	20	0.81		0.31	0.44	1.30	7.34	49.3	215.4
1960	12.2	25	0.95	0.45	1.03	1.79	72.4	232.1	10.9	19	0.78		0.30	0.40	1.25	7.23	48.1	210.4
1961	12.6	24	1.04	0.44	1.01	1.81	74.8	257.4	11.4	19	0.80		0.28	0.45	1.27	7.40	50.1	227.1

* Per thousand live births; related live births from 1931 to 1956.

Table LX. Deaths, death rates per million living, and Standardised Mortality Ratios (1950–52 = 100), from selected causes, by sex, 1952 to 1961, England and Wales

		1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
All causes											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	257,760 239,724	259,490 244,039	259,797 242,099	266,976 251,888	267,904 253,427	266,407 248,463	270,639 256,204	269,878 257,773	269,172 257,096	280,782 270,970
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	12,210 10,493	12,237 10,655	12,204 10,532	12,482 10,927	12,451 10,947	12,306 10,682	12,447 10,965	12,332 10,969	12,196 10,855	12,565 11,376
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	96 93	96 94	95 91	97 93	96 92	94 88	95 90	94 89	92 87	95 90
Tuberculosis, all forms (001–019)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	7,114 3,471	5,964 2,938	5,392 2,505	4,533 1,959	3,804 1,571	3,414 1,370	3,207 1,273	2,810 1,044	2,502 933	2,406 928
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	337 152	281 128	253 109	212 85	177 68	158 59	147 54	128 44	113 39	108 39
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	82 72	69 61	62 52	52 41	43 33	38 28	36 26	31 21	27 19	26 19
All malignant neoplasms (140–205)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	45,429 42,213	45,935 41,989	47,313 42,782	48,160 43,180	48,935 43,775	50,056 43,961	50,735 45,069	51,783 45,334	52,779 46,009	53,441 46,474
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	2,152 1,848	2,166 1,833	2,223 1,861	2,252 1,873	2,274 1,891	2,312 1,890	2,333 1,929	2,366 1,929	2,391 1,943	2,392 1,951
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	101 99	102 98	103 98	104 98	105 97	106 96	106 97	107 97	108 97	108 96
Malignant neoplasm of stomach (151)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	8,039 6,316	8,016 6,176	7,818 6,232	7,942 6,146	7,712 6,163	7,951 5,966	7,934 6,178	7,930 6,146	7,846 6,107	7,784 6,004
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	381 276	378 270	367 271	371 267	358 266	367 257	365 264	362 262	356 258	348 252
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	99 97	98 93	95 92	95 90	91 89	93 84	92 85	91 83	88 81	87 79
Malignant neoplasm of trachea, bronchus and lung (162, 163)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	11,942 2,228	12,835 2,239	13,941 2,323	14,761 2,438	15,544 2,553	16,358 2,670	17,040 2,780	18,181 2,882	18,882 3,118	19,460 3,350
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	566 98	605 98	655 101	690 106	722 110	756 115	784 119	831 123	856 132	871 141
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	107 105	114 104	122 107	128 111	133 115	138 118	142 121	149 124	153 132	156 140
Malignant neoplasm of breast (170)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	59 8,251	81 8,115	80 8,315	77 8,449	69 8,522	70 8,552	73 8,949	62 8,708	63 9,059	81 9,286
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	3 361	4 354	4 362	4 367	3 368	3 368	3 383	3 371	3 382	4 390
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	94 101	128 99	125 100	119 100	105 100	105 99	109 101	92 97	92 100	117 102
Malignant neoplasm of uterus (171–174)											
Deaths	F	4,008	3,926	3,827	3,844	3,921	3,912	4,115	4,003	4,088	3,981
Rate	F	175	171	166	167	169	168	176	170	173	167
S.M.R.	F	97	94	91	90	91	89	93	89	90	87
Leukaemia and aleukaemia (204)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	1,102 941	1,116 1,005	1,142 1,018	1,223 1,001	1,229 1,086	1,301 1,093	1,301 1,085	1,315 1,219	1,476 1,218	1,408 1,237
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	52 41	53 44	54 44	57 43	57 47	60 47	60 46	60 52	67 51	63 52
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	107 103	108 109	110 110	117 107	116 115	122 115	121 113	121 125	134 124	126 125

Table LX—continued

		1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Diabetes mellitus (260)											
Deaths	$\begin{cases} M \\ F \end{cases}$	1,091 2,247	1,066 2,128	1,048 1,980	1,084 2,207	1,108 2,134	1,013 2,124	1,152 2,163	1,100 2,093	1,193 2,366	1,331 2,538
Rate	$\begin{cases} M \\ F \end{cases}$	52 98	50 93	49 86	51 96	51 92	47 91	53 93	50 89	54 100	60 107
S.M.R.	$\begin{cases} M \\ F \end{cases}$	92 92	89 86	87 78	89 86	90 82	81 80	92 80	87 77	93 85	103 90
Vascular lesions affecting central nervous system (330-334)											
Deaths	$\begin{cases} M \\ F \end{cases}$	29,158 40,230	28,762 39,307	30,516 41,626	31,098 43,054	31,034 43,453	30,537 43,132	31,298 44,879	30,897 44,253	31,006 45,216	31,160 45,863
Rate	$\begin{cases} M \\ F \end{cases}$	1,381 1,761	1,356 1,716	1,433 1,811	1,454 1,868	1,442 1,877	1,411 1,854	1,439 1,921	1,412 1,883	1,405 1,909	1,394 1,925
S.M.R.	$\begin{cases} M \\ F \end{cases}$	102 101	99 97	104 100	105 101	104 100	100 97	102 99	100 96	99 96	99 96
Diseases of the circulatory system (400-468)											
Deaths	$\begin{cases} M \\ F \end{cases}$	92,513 90,151	91,423 90,477	94,637 91,331	96,704 95,222	98,065 95,470	95,784 92,566	99,907 97,738	96,306 95,526	100,244 98,319	102,364 102,394
Rate	$\begin{cases} M \\ F \end{cases}$	4,382 3,946	4,311 3,950	4,446 3,973	4,521 4,131	4,558 4,124	4,425 3,980	4,595 4,183	4,401 4,065	4,542 4,151	4,581 4,299
S.M.R.	$\begin{cases} M \\ F \end{cases}$	97 93	95 92	97 90	98 92	99 91	95 86	98 89	94 85	96 86	98 88
Arteriosclerotic heart disease (420)											
Deaths	$\begin{cases} M \\ F \end{cases}$	39,568 22,827	39,449 23,175	42,919 24,925	44,857 26,813	47,476 28,300	48,266 28,910	52,085 31,956	52,193 32,729	56,514 35,447	58,396 37,379
Rate	$\begin{cases} M \\ F \end{cases}$	1,874 999	1,860 1,012	2,016 1,084	2,097 1,163	2,206 1,222	2,230 1,243	2,395 1,368	2,385 1,393	2,561 1,497	2,613 1,569
S.M.R.	$\begin{cases} M \\ F \end{cases}$	105 103	104 103	112 108	116 115	121 119	122 119	129 129	128 130	137 138	140 144
Diseases of the respiratory system (470-527)											
Deaths	$\begin{cases} M \\ F \end{cases}$	31,951 21,038	36,799 26,364	31,090 20,056	35,381 23,345	36,080 24,428	37,939 24,066	37,024 23,784	40,756 27,796	34,833 22,122	43,372 29,732
Rate	$\begin{cases} M \\ F \end{cases}$	1,514 921	1,735 1,151	1,460 873	1,654 1,013	1,677 1,055	1,753 1,035	1,703 1,018	1,862 1,183	1,578 934	1,941 1,248
S.M.R.	$\begin{cases} M \\ F \end{cases}$	87 77	100 96	83 71	94 81	95 83	98 80	96 79	104 91	88 71	108 94
Influenza (480-483)											
Deaths	$\begin{cases} M \\ F \end{cases}$	879 871	2,905 3,560	878 933	1,460 1,523	1,272 1,354	3,553 3,163	1,216 1,185	3,898 3,964	553 545	3,487 3,615
Rate	$\begin{cases} M \\ F \end{cases}$	42 38	137 155	41 41	68 66	59 58	164 136	56 51	178 169	25 23	156 152
S.M.R.	$\begin{cases} M \\ F \end{cases}$	26 23	85 91	25 23	42 37	36 33	99 74	34 27	107 90	15 12	93 79
Pneumonia (490-493, 763)											
Deaths	$\begin{cases} M \\ F \end{cases}$	10,335 9,218	11,273 10,414	9,750 9,126	11,101 10,715	11,671 11,549	12,074 11,488	12,311 12,264	13,648 13,692	12,269 12,806	14,513 15,466
Rate	$\begin{cases} M \\ F \end{cases}$	490 404	532 455	458 397	519 465	542 499	558 494	566 525	624 583	556 541	649 649
S.M.R.	$\begin{cases} M \\ F \end{cases}$	97 93	105 104	90 90	102 104	107 110	109 107	110 112	121 123	107 113	125 134
Bronchitis (500-502)											
Deaths	$\begin{cases} M \\ F \end{cases}$	17,781 9,787	19,567 11,141	17,163 8,625	19,318 9,675	19,890 10,019	18,956 8,141	20,326 9,070	20,193 8,858	18,997 7,488	22,203 9,160
Rate	$\begin{cases} M \\ F \end{cases}$	842 428	923 486	806 375	903 420	924 433	876 350	935 388	923 377	861 316	994 385
S.M.R.	$\begin{cases} M \\ F \end{cases}$	91 81	99 91	86 68	96 76	98 77	92 61	98 68	96 65	89 54	103 65

Table LX—continued

		1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
Ulcer of stomach and duodenum (540, 541)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	4,059 1,325	3,795 1,331	4,011 1,467	3,975 1,542	3,778 1,564	3,568 1,461	3,425 1,473	3,090 1,473	3,165 1,540	2,950 1,455
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	192 58	179 58	188 64	186 67	176 68	165 63	158 63	141 63	143 65	132 61
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	99 100	92 99	96 107	94 111	89 111	83 101	79 101	70 99	71 102	66 95
Appendicitis (550-553)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	598 447	550 356	547 422	485 360	522 331	497 302	462 328	430 271	367 271	361 284
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	28 20	26 16	26 18	23 16	24 14	23 13	21 14	20 12	17 11	16 12
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	88 89	81 70	80 82	70 69	75 63	71 57	65 61	60 50	51 49	49 51
Nephritis and nephrosis (590-594)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	2,898 2,795	2,706 2,549	2,645 2,453	2,448 2,294	2,554 2,125	2,250 1,945	2,158 1,920	1,923 1,762	2,005 1,709	1,866 1,632
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	137 122	128 111	124 107	114 100	119 92	104 84	99 82	88 75	91 72	84 69
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	92 89	86 80	83 76	76 70	79 64	69 58	66 57	58 51	60 49	55 46
Accidents, poisonings and violence (E800-E999)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	11,992 6,810	12,333 7,531	12,630 8,239	12,932 8,537	12,992 8,878	12,858 8,703	13,343 9,113	13,456 9,379	13,503 9,619	13,654 9,660
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	568 298	582 329	593 358	605 370	604 383	594 374	614 390	615 399	612 406	611 406
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	99 96	101 104	103 112	105 115	105 118	103 113	106 117	106 119	105 120	105 119
Motor vehicle traffic accidents (E810-E825)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	3,013 958	3,225 1,021	3,289 1,158	3,552 1,256	3,655 1,284	3,608 1,219	3,966 1,400	4,345 1,607	4,676 1,881	4,669 1,875
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	143 42	152 45	155 50	166 54	170 55	167 52	182 60	199 68	212 79	209 79
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	96 92	102 97	104 109	112 118	115 119	112 111	123 127	133 144	142 166	140 164
Accidents in the home and residential institutions (E870-0 and -7-E936-0 and -7)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	1,955 3,271	2,157 3,738	2,452 4,165	2,424 4,227	2,516 4,392	2,419 4,248	2,559 4,442	2,519 4,491	2,478 4,552	2,481 4,401
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	93 143	102 163	115 181	113 183	117 190	112 183	118 190	115 191	112 192	111 185
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	102 96	113 108	127 118	125 118	129 120	122 113	128 116	125 115	121 114	120 109
Suicide and self-inflicted injury (E970-E979)											
Deaths	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	2,788 1,550	3,020 1,734	3,178 1,865	3,060 1,940	3,198 2,084	3,170 2,145	3,175 2,123	3,116 2,091	3,058 2,054	3,025 2,175
Rate	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	132 68	142 76	149 81	143 84	149 90	146 92	146 91	142 89	139 87	135 91
S.M.R.	$\begin{cases} \text{M} \\ \text{F} \end{cases}$	98 97	106 108	110 115	105 119	109 126	107 129	106 127	104 124	101 121	98 127

Table LXI. Death rates per 1,000 living, by sex and age, and Standardised Mortality Ratios (all ages) in standard regions and urban and rural aggregates within regional groups, 1961, England and Wales

	Males						Females							
	All ages	0-	5-	15-	45-	65 and over	S.M.R.	All ages	0-	5-	15-	45-	65 and over	S.M.R.
ENGLAND AND WALES														
Urban and rural aggregates	12.6	6.12	0.44	1.54	13.8	82.8	100	11.4	4.78	0.28	1.00	7.40	60.7	100
Conurbations	12.6	6.39	0.42	1.59	14.9	86.2	105	11.2	5.09	0.26	1.00	7.53	61.4	101
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	13.1	6.51	0.41	1.52	14.7	88.9	107	11.7	4.97	0.25	1.03	7.86	63.5	105
Urban areas with populations of 50,000 and under 100,000	13.0	5.68	0.43	1.52	14.1	85.2	102	11.9	4.91	0.29	0.97	7.60	60.6	100
Urban areas with populations under 50,000	12.9	6.11	0.42	1.53	13.1	81.7	98	11.7	4.64	0.33	0.99	7.20	60.3	99
Rural districts	11.6	5.57	0.49	1.47	11.6	74.7	89	11.0	4.23	0.29	0.99	6.98	58.4	96
NORTH OF ENGLAND														
Regions:	13.5	6.79	0.45	1.71	15.5	89.5	110	12.0	5.32	0.30	1.07	8.30	66.9	110
Northern	12.5	6.39	0.36	1.67	14.7	83.2	103	11.0	4.76	0.32	1.09	7.96	65.8	108
East and West Ridings	13.4	6.98	0.47	1.70	14.8	88.2	107	11.8	5.15	0.31	0.98	8.13	65.4	108
North Western	14.2	6.87	0.48	1.75	16.4	93.7	115	12.7	5.72	0.28	1.12	8.55	68.4	113
Conurbations:	13.8	7.02	0.48	1.78	16.7	92.4	115	12.2	5.49	0.32	1.06	8.43	67.2	111
Tyneside	12.8	6.71	0.39	1.81	15.7	86.2	108	10.7	4.49	0.31	1.09	7.92	64.2	106
West Yorkshire	14.2	6.83	0.52	1.85	15.9	89.7	111	12.7	5.17	0.36	0.98	8.19	66.5	109
South East Lancashire	14.3	7.09	0.46	1.77	17.4	94.0	118	12.7	5.64	0.31	1.08	8.51	69.3	114
Merseyside	13.0	7.28	0.51	1.69	17.0	97.8	119	11.3	6.19	0.27	1.11	8.91	65.8	111
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	14.1	6.71	0.44	1.73	16.4	94.8	115	11.9	5.52	0.25	1.20	8.53	66.4	111
Urban areas with populations of 50,000 and under 100,000	14.3	7.31	0.41	1.81	16.0	93.1	114	12.6	5.87	0.27	1.15	8.62	68.2	113
Urban areas with populations under 50,000	13.5	6.53	0.39	1.65	14.2	86.6	104	12.1	5.23	0.32	0.99	8.01	67.1	110
Rural districts	11.9	6.10	0.47	1.53	12.5	79.8	95	11.2	4.38	0.26	1.07	7.88	64.9	106

WALES AND MIDLANDS		12.2	6.37	0.42	1.61	13.8	82.1	100	10.7	4.88	0.31	1.01	7.46	60.9	101
<i>Regions:</i>															
Wales	..	14.0	6.78	0.49	1.90	14.7	88.2	108	11.7	5.34	0.37	1.12	8.09	64.2	107
North Midland	..	11.8	5.82	0.40	1.46	12.8	79.5	95	10.5	4.36	0.27	0.94	7.11	59.8	98
Midland	..	11.5	6.58	0.40	1.56	14.1	80.4	99	10.2	5.04	0.31	1.01	7.36	60.0	99
<i>Conurbation:</i>															
West Midlands	..	11.6	6.76	0.43	1.59	15.1	82.1	103	10.0	5.35	0.27	1.02	7.13	60.9	100
<i>Areas outside conurbation:</i>															
Urban areas with populations of 100,000 and over	..	12.8	7.20	0.41	1.56	15.1	89.8	109	11.0	5.20	0.25	0.99	8.01	64.9	107
Urban areas with populations of 50,000 and under 100,000	..	12.2	5.24	0.32	1.54	14.1	80.3	98	10.3	4.98	0.31	0.86	7.84	59.0	99
Urban areas with populations under 50,000	..	13.0	6.25	0.42	1.65	13.7	85.2	102	11.3	4.73	0.36	1.07	7.56	62.3	103
Rural districts	..	11.5	5.86	0.45	1.62	11.9	74.9	91	10.4	4.38	0.33	1.00	7.12	57.3	95
SOUTH AND EAST OF ENGLAND (excluding Greater London)		12.1	5.39	0.47	1.35	11.9	77.1	91	11.7	4.17	0.29	0.94	6.66	57.0	93
<i>Regions:</i>															
London and South Eastern (excluding Greater London)	..	13.8	5.45	0.51	1.44	12.2	79.8	94	13.1	4.17	0.29	0.92	6.69	58.2	95
Southern	..	11.3	5.81	0.45	1.30	12.2	74.8	90	11.0	4.28	0.25	0.94	6.55	55.5	91
South Western	..	12.9	5.21	0.44	1.38	12.5	81.9	96	12.4	4.35	0.31	0.98	7.08	59.7	98
Eastern	..	11.0	5.18	0.48	1.30	10.9	71.9	85	10.4	3.94	0.31	0.91	6.32	54.4	89
<i>Urban areas with populations of 100,000 and over</i>		12.6	5.70	0.39	1.30	13.0	84.3	99	12.1	4.30	0.25	0.91	7.20	60.4	99
Urban areas with populations of 50,000 and under 100,000	..	12.4	4.87	0.49	1.34	12.9	83.2	97	12.1	4.28	0.30	0.91	6.87	57.5	94
Urban areas with populations under 50,000	..	12.5	5.72	0.44	1.37	11.9	76.6	91	11.8	4.16	0.32	0.95	6.45	55.6	91
Rural districts	..	11.5	5.14	0.53	1.35	11.0	72.6	86	11.2	4.06	0.28	0.96	6.53	56.7	92
GREATER LONDON		12.1	5.72	0.38	1.45	13.6	82.5	99	10.7	4.64	0.20	0.94	6.95	57.3	94

Table LXII. Deaths from certain causes: (a) by sex and age, (b) distinguishing deaths in which a post-mortem was performed or there was a record of operation, and (c) the percentage to all deaths, 1961, England and Wales

ICD No.	Cause of death	Males					Females					Persons	
		All ages	0—	15—	45—	65 and over	All ages	0—	15—	45—	65 and over	All ages	All ages
	All causes	280,782 78,987 28	13,072 6,917 53	14,026 7,872 56	78,238 28,447 36	175,446 35,751 20	270,970 56,136 21	9,489 4,717 50	9,049 4,006 44	45,825 14,097 31	206,607 33,316 16	551,752 135,123 24	
001-008	Tuberculosis, respiratory	2,240 740 33	7 6 86	218 69 32	1,050 356 34	965 309 32	762 232 30	— — —	196 46 23	297 104 35	269 82 30	3,002 972 32	
010-019	Tuberculosis, other	166 79 48	8 4 50	51 22 43	64 32 50	43 21 49	166 81 49	20 11 55	31 19 61	46 22 48	69 29 42	332 160 48	
020-029	Syphilitic disease	556 252 45	1 1 100	23 15 65	209 93 44	323 143 44	344 198 58	— — —	5 1 20	91 54 59	248 143 58	900 450 50	
056	Whooping cough	17 (a)	17 (b)	— (c)	— (a)	— (b)	10 (c)	10 (a)	— (b)	— (c)	— (a)	27 (b)	
057	Meningococcal infections	65 45 69	55 38 69	5 5 100	2 1 50	3 1 33	65 34 69	51 31 67	5 4 80	3 3 100	6 4 67	130 90 69	
080	Acute poliomyelitis	44 16 36	17 9 29	25 9 36	2 2 100	— — —	15 10 67	8 5 62	6 5 67	1 4 100	— — —	59 26 44	
085	Measles	79 29 37	73 28 38	4 1 25	1 — —	1 — —	73 23 32	65 20 31	5 3 60	3 — —	— — —	152 52 34	
Rem. 001-138	Other diseases classified as infective or parasitic	507 226 45	135 77 57	91 47 52	151 60 40	130 42 32	530 250 47	90 65 72	84 58 65	155 68 44	201 62 31	1,037 476 46	
151	Malignant neoplasm: Stomach	7,784 1,380 18	— — —	240 52 22	2,998 587 20	4,546 741 16	6,004 811 14	— — —	155 29 19	1,363 212 16	4,486 570 13	13,788 2,191 16	
162, 163	Trachea, bronchus, and lung	19,460 3,716 19	2 1 50	590 127 22	10,065 1,970 20	8,803 1,618 18	3,350 733 22	1 — —	190 32 17	1,460 321 22	1,699 448 22	22,810 4,449 20	

170	Breast	..	..	..	81 16 20	— — —	2 2 100	32 9 28	47 5 11	9,286 1,621 17	— — —	4,261 133 19	4,335 681 16	9,367 1,637 17
171-174	Uterus	..	..	..	— — —	— — —	— — —	— — —	— — —	3,981 563 14	2 1 50	1,776 266 15	1,815 237 13	3,981 563 14
204	Leukaemia and aleukaemia	..	..	..	1,408 289 21	212 38 18	248 59 24	441 110 25	507 82 16	1,237 206 17	141 21 15	378 87 19	539 495 16	2,645 495 19
Rem. 140-205	Other malignant and lymphatic neo- plasms	..	..	..	24,708 5,447 22	246 84 34	1,431 356 25	7,905 1,944 25	15,126 3,063 20	22,616 4,575 20	203 50 25	7,364 1,611 22	13,831 2,646 19	47,324 10,022 21
260	Diabetes mellitus	..	..	..	1,331 286 21	17 8 47	97 44 45	307 98 32	910 136 15	2,538 462 18	17 5 29	451 149 33	2,010 279 14	3,869 748 19
330-334	Vascular lesions affecting central nervous system	..	..	..	31,160 3,676 12	46 35 76	535 305 58	6,035 1,578 26	24,544 1,754 7	45,863 4,621 10	16 13 81	5,689 1,505 26	39,673 2,846 7	77,023 8,297 11
420	Arteriosclerotic heart disease, includ- ing coronary disease	..	..	..	58,396 21,928 38	3 3 100	1,674 1,151 69	21,641 10,036 46	35,078 10,738 31	37,379 10,187 27	1 1 100	5,833 2,085 36	31,315 7,966 25	95,775 32,115 34
440-443	Hypertension with heart disease	..	..	..	4,495 880 20	— — —	51 30 59	955 299 31	3,489 551 16	6,730 823 12	1 — —	830 208 25	5,877 604 10	11,225 1,703 15
410-416, 421-434	Other heart disease	..	..	..	28,252 3,328 12	33 20 61	776 355 46	3,877 1,179 30	23,566 1,774 8	44,113 3,902 9	23 15 65	3,910 1,005 41	39,330 2,531 6	72,365 7,230 10
444-468	Other circulatory disease	..	..	..	11,165 3,559 32	10 4 40	275 143 52	2,186 1,122 51	8,694 2,290 26	14,125 4,002 28	9 5 56	1,495 763 51	12,397 3,100 25	25,290 7,561 30
480-483	Influenza	..	..	..	3,487 434 12	57 30 53	176 81 46	868 170 20	2,386 153 6	3,615 296 8	37 18 49	466 90 19	2,958 116 4	7,102 730 10
490-493, 763	Pneumonia	..	..	..	14,513 4,267 29	1,628 1,126 69	349 180 52	2,252 997 44	10,284 1,964 19	15,466 3,239 21	1,210 800 66	1,397 542 39	12,558 1,753 14	29,979 7,506 25
500-502	Bronchitis	..	..	..	22,203 3,792 17	287 219 76	210 83 40	6,382 1,358 21	15,324 2,132 14	9,160 1,436 16	198 151 76	1,327 294 22	7,496 933 12	31,363 5,228 17
470-475, 510-527	Other diseases of respiratory system...	..	..	..	3,595 1,667 46	113 82 73	167 85 51	1,271 689 54	2,044 811 40	1,769 506 29	90 72 80	344 127 37	1,216 284 22	5,364 2,173 41

Table LXII—continued

ICD No.	Cause of death	Males					Females					Persons
		All ages	0-	15-	45-	65 and over	All ages	0-	15-	45-	65 and over	
540, 541	Ulcer of stomach and duodenum .. (a) (b) (c)	2,950 1,821 62	3 3 100	104 79 76	938 660 70	1,905 1,079 57	1,455 820 56	1 1 100	28 21 75	270 184 68	1,156 614 53	4,405 2,641 60
543, 571, 572, 764	Gastritis, enteritis, and diarrhoea .. (a) (b) (c)	1,068 597 56	282 161 57	72 46 64	251 179 71	463 211 46	1,577 764 48	224 126 56	75 37 49	241 149 62	1,037 452 44	2,645 1,361 51
590-594	Nephritis and nephrosis .. (a) (b) (c)	1,866 428 23	37 15 41	324 90 28	666 175 26	839 148 18	1,632 382 23	35 13 37	197 46 23	424 125 29	976 198 20	3,498 810 23
610	Hyperplasia of prostate .. (a) (b) (c)	3,075 1,277 42	— — —	— — —	163 118 72	2,912 1,159 40	— — —	— — —	— — —	— — —	— — —	3,075 1,277 42
640-689	Pregnancy, childbirth, abortion .. (a) (b) (c)	— — —	— — —	— — —	— — —	— — —	274 236 86	— — —	272 235 86	2 1 50	— — —	274 236 86
750-759	Congenital malformations .. (a) (b) (c)	2,671 1,416 53	2,180 1,159 53	193 111 58	208 102 49	90 44 49	2,525 1,205 48	2,045 950 46	185 104 56	191 95 50	104 56 54	5,196 2,621 50
Rem. 210-795	Other defined and ill-defined diseases (a) (b) (c)	19,786 7,281 37	6,291 2,799 44	1,237 637 51	3,550 1,621 46	8,708 2,224 26	24,650 7,372 30	4,355 1,848 42	1,199 571 48	3,676 1,636 45	15,420 3,317 22	44,436 14,653 33
E810- E835	Motor vehicle accidents .. (a) (b) (c)	4,753 3,712 78	426 297 70	2,378 1,847 78	965 781 81	984 790 80	1,881 1,476 78	220 158 72	475 378 80	417 325 78	769 615 80	6,634 5,188 78
E800- E802- E840- E860	All other accidents .. (a) (b) (c)	5,675 3,973 70	844 632 75	1,473 1,083 74	1,402 1,065 76	1,956 1,193 61	5,498 3,261 59	391 310 79	309 235 76	567 436 77	4,231 2,280 54	11,173 7,234 65
E963, E970- E979	Suicide and self-inflicted injury .. (a) (b) (c)	3,025 2,266 75	2 1 50	930 694 75	1,353 1,020 75	740 551 74	2,176 1,715 79	2 2 100	520 431 81	1,081 851 77	573 459 80	5,201 3,981 77
E964, E965, E980- E999	Homicide and operations of war .. (a) (b) (c)	201 157 78	40 34 85	77 60 78	48 39 81	36 24 67	105 81 77	23 20 87	53 42 79	16 7 44	13 12 92	306 238 78

Table LXIII. Notifications of certain infectious diseases: notification rates per 100,000 living, by sex and age, 1961, England and Wales

	Scarlet fever		Whooping cough		Acute poliomyelitis				Measles (excluding rubella)		Diphtheria		Dysentery		Meningococcal infection	
	M		M		Paralytic		Non-paralytic		M	F	M	F	M	F	M	F
					M	F	M	F								
Under 1 year	14	14	312	309	5.5	6.3	0.74	0.26	3,112	3,303	—	—	130	124	28	20
1	62	60	320	346	16	9.4	2.1	1.1	9,827	9,741	—	—	234	216	16	9.7
2	173	159	369	441	11	13	1.3	2.0	13,123	13,132	—	—	252	234	9.0	6.2
3	259	256	358	441	11	12	1.6	2.6	14,214	14,705	—	—	208	189	5.7	4.6
4	362	345	364	405	9.6	7.4	3.4	1.2	15,037	15,050	—	—	205	171	5.6	3.6
5-9	308	336	254	299	3.8	3.9	2.2	1.6	10,159	10,194	0.56	0.60	158	138	2.7	2.1
10-14	59	71	39	43	1.0	1.0	0.37	0.89	560	615	0.72	0.95	57	46	0.85	1.2
15-19	13	11	2.5	4.2	1.0	0.96	0.33	0.17	71	81	0.16	0.34	17	33	0.85	0.63
20 and over	0.88	1.1	0.82	1.5	0.49	0.28	0.04	0.03	8.8	10	0.07	0.07	14	18	0.27	0.22
All ages	45	42	52	54	1.7	1.4	0.42	0.32	1,742	1,571	0.09	0.13	45	43	1.7	1.2

	Acute pneumonia		Acute encephalitis		Enteric or typhoid fever		Paratyphoid fevers		Erysipelas		Food poisoning	
	M		Infective		Post-infectious		M	F	M	F	M	F
Under 5 years	63	53	1.1	0.84	1.3	1.0	0.43	0.39	0.80	1.3	0.80	0.73
5-9	24	21	0.56	0.38	1.3	0.83	0.40	0.18	0.87	1.1	1.0	0.89
10-14	20	18	0.23	0.22	0.09	0.35	0.11	0.41	0.41	0.49	2.1	3.1
15-19	58	36	0.12	—	0.12	0.06	0.11	0.08	0.23	0.29	8.4	9.6
20 and over	121	88	0.05	—	—	—	—	0.15	0.42	0.41	11	10
All ages	44	36	0.31	0.20	0.38	0.30	0.27	0.14	0.48	0.60	4.3	5.4

Table LXIII—continued

					Tuberculosis					
					Respiratory		Meninges and C.N.S.		Other	
					M	F	M	F	M	F
Under 5 years	..	..	..	..	18	18	0·96	1·1	2·6	2·2
5- ..	..	..	..	..	15	16	0·68	0·56	3·7	3·8
15- ..	..	..	..	..	48	52	0·52	0·70	6·7	8·6
25- ..	..	..	..	..	61	43	0·41	0·30	7·3	9·8
45- ..	..	..	..	..	83	21	0·12	0·18	3·8	4·1
65 and over	..	..	..	..	74	14	0·05	0·03	3·5	4·4
All ages	..	..	..	..	55	29	0·41	0·38	5·0	6·0

Table LXIV. Trend of stillbirths per 1,000 total births, 1928 to 1961, and of deaths in the neonatal, post-neonatal, and other age periods under 1 year per 1,000 live births, 1906 to 1961, England and Wales

Period	Infant mortality per 1,000 live births* at various ages							Stillbirths and infant deaths—rates per 1,000 total births†						
	Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 week "perinatal mortality"	Stillbirths (late foetal deaths at or over 28 weeks' gestation)	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year				
1906-1910 ..	117.1	40.2	24.5	15.7	76.9	11.5	13.0	22.8	22.0	32.1	—	—	—	—
1911-1915 ..	108.7	39.0	24.1	14.9	69.8	11.4	12.7	20.2	19.6	30.0	—	—	—	—
1916-1920 ..	90.9	37.0	23.4	13.7	53.9	11.0	12.4	16.5	14.6	22.8	—	—	—	—
1921-1925 ..	74.9	33.4	21.7	11.7	41.6	10.4	11.3	12.8	11.3	17.5	—	—	—	—
1926-1930 ..	67.6	31.8	21.8	9.9	35.7	10.3	11.5	10.8	9.5	15.4	—	—	—	—
1931-1935 ..	61.9	31.4	22.4	9.0	30.5	10.7	11.7	9.9	8.5	12.1	100.6	41.0	62.5	38.1
1936-1940 ..	55.3	29.2	21.5	7.7	26.0	10.4	11.2	8.8	7.8	9.4	91.7	38.5	59.2	32.5
1941-1945 ..	49.8	26.0	18.7	7.2	23.8	9.3	9.5	8.9	7.7	7.2	78.5	30.5	48.6	29.9
1946-1950 ..	36.3	21.1	16.2	4.9	15.2	7.9	8.4	5.8	5.0	4.4	59.5	24.0	39.8	19.6
1951-1955 ..	26.9	18.0	15.0	3.0	8.9	7.5	7.5	3.4	3.0	2.5	49.2	23.0	37.6	11.6
1956-1960 ..	22.6	16.2	13.8	2.4	6.5	7.5	6.3	2.6	2.1	1.8	43.6	21.4	34.9	8.7
1928 ..	65.3	31.1	21.6	9.5	34.2	10.4	11.2	10.7	9.3	14.2	102.6	40.1	60.8	41.7
1929 ..	73.9	32.8	22.2	10.5	41.1	10.4	11.9	11.5	10.6	19.0	111.4	40.0	61.4	50.0
1930 ..	60.2	30.9	22.0	8.9	29.3	10.4	11.6	9.7	7.9	11.7	98.3	40.8	61.9	36.4
1931 ..	65.7	31.5	22.1	9.5	34.2	10.4	11.7	10.8	9.2	14.2	104.5	40.9	62.1	42.4
1932 ..	64.5	31.5	22.4	9.2	33.0	10.6	11.8	10.8	9.0	13.2	103.7	41.3	62.8	40.8
1933 ..	62.7	32.1	22.9	9.3	30.6	11.0	11.8	9.8	8.6	12.2	102.5	41.4	63.4	39.1
1934 ..	59.3	31.4	22.7	8.7	27.9	10.9	11.8	8.9	7.7	11.3	96.7	40.5	62.2	34.5
1935 ..	57.0	30.4	22.0	8.4	26.6	10.7	11.3	9.1	7.7	9.8	95.4	40.7	61.9	33.5
1936 ..	58.7	30.2	21.9	8.2	28.5	10.7	11.3	9.3	8.3	10.9	95.9	39.7	60.8	35.2
1937 ..	57.7	29.7	22.0	7.8	28.0	10.8	11.2	9.4	8.3	10.3	94.4	39.0	60.2	34.2
1938 ..	52.8	28.3	21.1	7.1	24.5	10.3	10.8	8.2	7.3	9.0	88.9	38.3	58.6	30.4
1939 ..	50.6	28.3	21.2	7.1	22.2	10.3	10.9	7.9	7.0	7.3	86.9	38.1	58.5	28.4
1940 ..	56.8	29.6	21.3	8.3	27.2	9.8	11.5	9.3	8.2	9.7	92.5	37.2	57.7	34.7

* Rates based on related live births from 1926 to 1956.

† The births upon which these rates are based for successive calendar years are numbers registered up to 1938 inclusive, and numbers of occurrences from 1939.

Table LXIV—continued

Period	Total infant mortality (under 1 year)	Infant mortality per 1,000 live births* at various ages							Stillbirths and infant deaths—rates per 1,000 total births†							
		Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year "birth wastage"	Stillbirths (late foetal deaths, at or over 28 weeks' gestation)	Stillbirths plus infant deaths under 1 week "perinatal mortality"	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks	
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year						
1941	..	60.0	29.0	20.7	8.3	31.1	10.1	10.6	11.3	9.7	10.1	92.4	34.8	54.7	37.7	62.7
1942	..	50.6	27.2	19.6	7.7	23.4	9.6	10.0	8.7	7.5	7.2	81.1	33.2	52.1	29.0	59.4
1943	..	49.1	25.2	18.3	6.9	23.9	9.1	9.2	8.8	7.3	7.3	77.5	30.1	47.9	29.6	54.6
1944	..	45.4	24.4	17.5	6.9	21.1	8.8	8.8	8.0	7.0	6.1	70.9	27.6	44.5	26.3	51.1
1945	..	46.0	24.8	18.0	6.8	21.3	9.0	9.0	8.2	7.0	6.1	73.4	27.6	45.2	28.1	51.8
1946	..	42.9	24.5	17.8	6.7	18.4	8.7	9.1	7.1	6.1	5.2	66.9	27.2	44.3	22.6	50.7
1947	..	41.4	22.7	16.5	6.2	18.6	7.8	8.7	6.9	6.0	5.7	65.0	24.1	40.3	24.6	46.4
1948	..	33.9	19.7	15.6	4.1	14.2	7.8	7.9	5.5	4.8	3.9	56.8	23.2	38.5	18.4	42.5
1949	..	32.4	19.3	15.6	3.7	13.0	7.6	8.0	4.8	4.4	3.8	54.6	22.7	38.0	16.7	41.5
1950	..	29.6	18.5	15.2	3.3	11.1	7.2	8.0	4.3	3.7	3.1	51.7	22.6	37.4	14.3	40.7
1951	..	29.7	18.8	15.5	3.3	10.9	7.5	8.0	4.1	3.6	3.2	52.2	23.0	38.2	14.0	41.5
1952	..	27.6	18.3	15.2	3.2	9.3	7.6	7.6	3.7	3.0	2.6	49.6	22.7	37.5	12.1	40.6
1953	..	26.8	17.7	14.8	2.9	9.1	7.4	7.4	3.4	3.0	2.7	48.6	22.4	36.9	11.7	39.7
1954	..	25.4	17.7	14.9	2.8	7.7	7.6	7.4	3.0	2.6	2.1	48.4	23.5	38.1	10.3	40.8
1955	..	24.9	17.3	14.6	2.6	7.6	7.6	7.0	2.9	2.6	2.1	47.5	23.2	37.4	10.0	40.0
1956	..	23.7	16.8	14.2	2.6	6.9	7.4	6.8	2.7	2.3	1.8	46.0	22.9	36.7	9.2	39.3
1957	..	23.1	16.5	14.1	2.4	6.7	7.6	6.5	2.6	2.1	1.9	45.1	22.5	36.2	8.8	38.5
1958	..	22.5	16.2	13.8	2.4	6.4	7.5	6.3	2.6	2.1	1.7	43.6	21.5	35.0	8.6	37.3
1959	..	22.2	15.9	13.6	2.3	6.3	7.6	6.0	2.4	2.1	1.8	42.6	20.8	34.1	8.5	36.3
1960	..	21.8	15.5	13.3	2.2	6.3	7.5	5.8	2.5	2.1	1.6	41.1	19.8	32.8	8.3	35.0
1961	..	21.4	15.3	13.3	2.1	6.1	7.6	5.7	2.4	2.0	1.7	40.0	19.0	32.0	8.0	34.1

* Rates based on related live births from 1926 to 1956.

† The births upon which these rates are based for successive calendar years are numbers registered up to 1938 inclusive, and numbers of occurrences from 1939.

Table LXV. Stillbirths per 1,000 total births, and deaths in the early neonatal, late neonatal, and post-neonatal periods per 1,000 live births*, distinguishing illegitimacy, 1936 to 1961, England and Wales

		1936 to 1939	1940 to 1944	1945 to 1949	1950 to 1954	1955	1956	1957	1958	1959	1960	1961
All infants	Stillbirths (late foetal deaths at or over 28 weeks' gestation)	38.8 100	32.3 83	24.9 64	22.8 59	23.2 60	22.9 59	22.5 58	21.5 55	20.8 54	19.8 51	19.0 49
	Early neonatal deaths (Under 1 week)	21.6 100	19.3 89	16.7 77	15.1 70	14.6 68	14.2 66	14.1 65	13.8 64	13.6 63	13.3 62	13.3 62
	Late neonatal deaths (1 week and under 4 weeks)	7.6 100	7.5 99	5.5 72	3.1 41	2.6 34	2.6 34	2.4 32	2.4 32	2.3 30	2.2 29	2.1 28
	Post-neonatal deaths (4 weeks and under 1 year)	25.8 100	25.1 97	17.1 66	9.6 37	7.6 29	6.9 27	6.7 26	6.4 25	6.3 24	6.3 24	6.1 24
	Stillbirths (late foetal deaths at or over 28 weeks' gestation)	49.6 100	39.9 80	31.4 63	29.9 60	28.8 58	29.0 58	28.7 58	28.4 57	27.4 55	24.9 50	24.2 49
Illegitimate infants	Early neonatal deaths (under 1 week)	34.4 100	28.1 82	23.7 69	20.7 60	20.8 60	18.9 55	19.8 58	18.3 53	18.2 53	17.0 49	17.5 51
	Late neonatal deaths (1 week and under 4 weeks)	10.9 100	10.7 98	8.3 76	3.9 36	3.1 28	2.7 25	2.9 27	2.3 21	2.5 23	2.6 24	2.0 18
	Post-neonatal deaths (4 weeks and under 1 year)	41.6 100	35.8 86	23.5 56	11.1 27	7.8 19	7.1 17	7.3 18	7.2 17	6.7 16	6.9 17	5.8 14

* Rates prior to 1957 per 1,000 related live births.

Table LXVI. Principal causes of death under 1 year: (a) Age-group distribution per cent of all deaths assigned to each cause, (b) Cause distribution per 1,000 total deaths in each age-group, 1961, England and Wales

Aetiological group	Cause of death (and ICD No.)	Number of infant deaths under 1 year	Age distribution per cent of total infant deaths assigned to each cause				Cause distribution per 1,000 total infant deaths in each age-group					
			Infant mortality (under 1 year)	Neonatal mortality		Post-neonatal mortality (4 weeks and under 1 year)	Infant mortality (under 1 year)	Neonatal mortality		Post-neonatal mortality (4 weeks and under 1 year)		
				Under 4 weeks	Early (under 1 week)			Late (1 week under 4 weeks)	Under 4 weeks		Early (under 1 week)	Late (1 week under 4 weeks)
	All causes	17,393	100	72	62	10	28	1,000	1,000	1,000		
	Congenital malformations (750-759)	3,604	100	63	42	21	37	207	142	453		
	Total causes mainly of prenatal and natal origin other than congenital malformations	8,904	100	99	96	3	1	512	790	182		
Prenatal and natal group (including congenital malformations)	Intracranial and spinal injury at birth (760)	1,508	100	100	95	5	—	87	121	133		
	Other birth injury (including maternal antepartum haemorrhage) (761)	535	100	100	99	1	0	31	43	49		
	Postnatal asphyxia and atelectasis (762)	2,647	100	99	97	2	1	152	210	237		
	Attributed to maternal toxæmia (769)	213	100	100	98	2	—	12	17	19		
	Erythroblastosis (770)	334	100	98	95	3	2	19	26	29		
	Haemorrhagic disease of newborn (771)	190	100	99	93	6	1	11	15	16		
	Ill-defined diseases of early infancy (773)	453	100	98	92	6	2	26	36	39		
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3,024	100	99	95	4	1	174	240	267		
											66	7

Postnatal group	Total causes mainly of postnatal origin ..											
	4,039	100	26	13	13	74	232	84	49	306	606	
Unclassified	Causes classified as infective (001-138) and others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768) ..	529	100	28	7	21	72	30	12	3	66	77
	Tuberculosis, other than tuberculous meningitis (001-008, 011-019) ..	5	100	20	—	20	80	0	0	—	1	1
	Tuberculous meningitis (010) ..	7	100	—	—	—	100	0	—	—	—	1
	Septicaemia, skin and subcutaneous tissue infections, and sepsis of newborn (053, 690-698, 765-768) ..	99	100	76	18	58	24	6	2	34	5	
	Whooping cough and measles (056, 085) ..	48	100	6	—	6	94	3	—	2	9	
	Meningococcal infections and non-meningococcal meningitis (057, 340) ..	210	100	24	7	17	76	12	4	1	21	
	Causes classified as infective not specified above (rem. 001-138) ..	55	100	13	2	11	87	3	1	0	4	
	Otitis media and mastoiditis, empyema and pleurisy (391-393, 518, 519) ..	40	100	8	2	5	92	2	0	0	1	
	Acute upper respiratory infections and influenza (470-475, 480-483) ..	65	100	12	3	9	88	4	1	0	4	
	Pneumonia and bronchitis (490-493, 763, 500-502) ..	2,629	100	28	16	12	72	151	58	39	186	
	Gastro-enteritis (including diarrhoea of newborn) (571, 764) ..	387	100	16	2	14	84	22	5	1	33	
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925) ..	342	100	12	4	8	88	20	3	1	17	
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985) ..	69	100	83	78	4	17	4	5	5	2	
	Other violent causes (rem. E800-E999) ..	83	100	8	5	4	92	5	1	0	2	
Immaturity, or with mention of immaturity (774, 776, 760-5-773-5)	Total causes remaining ..	846	100	36	24	12	64	49	24	19	60	
	Neoplasms (140-239) ..	77	100	21	14	6	79	4	1	1	3	
	Other remaining causes ..	769	100	37	25	12	63	44	23	18	57	
	Immaturity, or with mention of immaturity (774, 776, 760-5-773-5) ..	6,545	100	99	95	4	1	376	522	577	173	
	Immaturity alone, or primary to diseases other than of early infancy (774, 776) ..	3,024	100	99	95	4	1	174	240	267	66	
All other causes	Immaturity associated with diseases of early infancy (760-5-773-5) ..	3,521	100	100	95	5	0	202	282	309	106	
	All other causes ..	10,848	100	55	42	13	45	624	478	423	827	

Table LXVII. Principal causes of death under 1 year in the neonatal, post-neonatal and other age periods, by sex, per 1,000 live births, 1961, England and Wales

Aetiological group	Cause of death (and ICD No.)	Infant mortality per 1,000 live births									
		Total infant mortality (under 1 year)	Neonatal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period		
							Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year
Prenatal and natal group (including congenital malformations)	All causes	23.91 18.82	17.39 13.16	15.15 11.28	2.24 1.88	6.52 5.66	8.54 6.63	6.61 4.65	2.68 2.11	2.13 1.90	1.71 1.65
	Congenital malformations (750-759)	4.42 4.47	2.85 2.78	1.93 1.83	0.91 0.96	1.57 1.68	0.82 0.89	1.11 0.94	0.81 0.74	0.43 0.51	0.34 0.43
	Total causes mainly of prenatal and natal origin other than congenital malformations	12.74 9.10	12.65 8.98	12.20 8.68	0.45 0.30	0.10 0.12	7.44 5.44	4.76 3.24	0.08 0.09	0.01 0.03	0.00 0.01
	Intracranial and spinal injury at birth (760)	2.32 1.37	2.32 1.37	2.20 1.31	0.12 0.07	—	1.00 0.73	1.20 0.58	—	—	—
	Other birth injury (including maternal ante-partum haemorrhage) (761)	0.80 0.51	0.80 0.51	0.79 0.50	0.01 0.00	0.00	0.60 0.39	0.19 0.11	0.00	—	—
	Postnatal asphyxia and atelectasis (762)	3.83 2.66	3.80 2.61	3.70 2.57	0.11 0.05	0.03 0.04	2.22 1.68	1.47 0.89	0.02 0.02	0.01 0.02	0.00 0.01
	Attributed to maternal toxæmia (769)	0.31 0.22	0.31 0.22	0.30 0.21	0.01 0.00	—	0.16 0.12	0.14 0.09	—	—	—
	Erythroblastosis (770)	0.41 0.41	0.40 0.40	0.39 0.39	0.01 0.01	0.01 0.01	0.26 0.28	0.13 0.11	0.00 0.01	0.00 0.01	—
	Haemorrhagic disease of newborn (771)	0.27 0.20	0.26 0.20	0.26 0.18	0.01 0.02	0.00 0.00	0.05 0.05	0.21 0.12	0.00 0.00	—	—
	Ill-defined diseases of early infancy (773)	0.70 0.40	0.69 0.39	0.66 0.36	0.03 0.03	0.01 0.02	0.30 0.17	0.36 0.19	0.01 0.01	—	—
	Immaturity alone, or primary to diseases other than early infancy (774, 776)	4.10 3.33	4.06 3.28	3.91 3.16	0.15 0.12	0.04 0.05	2.85 2.02	1.06 1.15	0.04 0.05	0.01	—

	Total causes mainly of postnatal origin	..	..	{ M F}	5.54 4.39	1.48 1.07	0.76 0.53	0.72 0.54	4.05 3.31	0.15 0.17	0.62 0.37	1.52 1.11	1.43 1.17	1.11 1.03
Postnatal group	Causes classified as infective (001-138) and others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768)			{ M F}	0.72 0.58	0.22 0.14	0.05 0.04	0.17 0.10	0.50 0.44	0.00 —	0.05 0.04	0.16 0.13	0.14 0.12	0.21 0.18
	Pneumonia and bronchitis (490-493, 763, 500-502)	..	{ M F}	3.63 2.83	1.05 0.73	0.62 0.40	0.43 0.33	2.58 2.10	0.54 0.30	0.08 0.09	0.54 0.30	1.03 0.74	0.94 0.81	0.61 0.55
	Gastro-enteritis (including diarrhoea of newborn) (571, 764)	..	{ M F}	0.48 0.47	0.08 0.08	0.01 0.01	0.07 0.07	0.39 0.39	0.01 0.01	—	0.01 0.01	0.15 0.13	0.12 0.11	0.14 0.15
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	..	{ M F}	0.51 0.32	0.06 0.04	0.02 0.01	0.04 0.03	0.46 0.28	0.02 0.01	—	0.02 0.01	0.16 0.09	0.20 0.11	0.10 0.08
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)	..	{ M F}	0.09 0.08	0.07 0.07	0.06 0.07	0.00 0.00	0.02 0.01	0.06 0.06	0.06 0.06	0.00 0.01	0.01 0.01	0.00 —	0.00 0.01
	Other violent causes (rem. E800-E999)	..	{ M F}	0.11 0.10	0.01 0.01	0.00 0.01	0.01 —	0.09 0.09	0.00 0.01	—	—	0.01 0.02	0.03 0.02	0.05 0.06
	Total causes remaining	..	{ M F}	1.21 0.86	0.42 0.32	0.26 0.24	0.16 0.08	0.79 0.54	0.13 0.14	0.12 0.10	0.27 0.17	0.26 0.19	0.26 0.19	0.26 0.19
	Unclassified	Neoplasms (140-239)	..	{ M F}	0.11 0.07	0.02 0.02	0.01 0.01	0.01 0.00	0.09 0.06	0.00 0.01	0.00 0.01	0.01 0.01	0.01 0.01	0.04 0.02	0.04 0.03
Other remaining causes		..	{ M F}	1.10 0.79	0.39 0.31	0.24 0.23	0.15 0.08	0.70 0.48	0.13 0.13	0.11 0.10	0.25 0.16	0.23 0.17	0.22 0.16	0.22 0.16
Imaturity, or with mention of immaturity (774, 776, 760.5-773.5)			{ M F}	9.32 6.73	9.28 6.66	8.89 6.34	0.39 0.32	0.04 0.07	5.56 3.85	3.33 2.49	0.04 0.06	— 0.01	— 0.00	— 0.00
	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	..	{ M F}	4.10 3.33	4.06 3.28	3.91 3.16	0.15 0.12	0.04 0.05	2.85 2.02	1.06 1.15	0.04 0.05	— 0.01	— —	— —
	Immaturity associated with diseases of early infancy (760.5-773.5)	..	{ M F}	5.22 3.40	5.22 3.38	4.98 3.18	0.24 0.20	0.00 0.02	2.71 1.84	2.26 1.34	0.00 0.02	— 0.01	— 0.00	0.00 —
All other causes	..	{ M F}	14.58 12.08	8.11 6.50	6.26 4.94	1.85 1.56	6.47 5.59	2.98 2.78	3.28 2.16	2.64 2.05	2.13 1.89	1.71 1.65	1.71 1.65	1.71 1.65

Table LXVIII. Stillbirths per 1,000 total births, and infant deaths in the early neonatal, late neonatal and post-neonatal periods, and from the principal causes of infant mortality; comparison of annual and quarterly rates, 1961, England and Wales

Aetiological group	Cause of death (and ICD No.)	Annual rates (per 1,000 live births)	Quarterly rates				Quarterly rates per cent of annual rates				
			Jan. to March	April to June	July to Sept.	Oct. to Dec.	Jan. to March	April to June	July to Sept.	Oct. to Dec.	
Stillbirths (late foetal deaths at or over 28 weeks' gestation)	.. .. .	19.02	19.24	18.27	18.57	20.04	101	96	98	105
	Early neonatal deaths (infant deaths at ages under 1 week)	13.27	13.53	13.25	12.68	13.65	102	100	96	103	
	Late neonatal deaths (infant deaths at ages 1 week and under 4 weeks)	2.06	2.29	1.88	1.94	2.15	111	91	94	104	
	Post-neonatal deaths (infant deaths at 4 weeks and under 1 year)	6.10	8.23	5.32	4.33	6.55	135	87	71	107	
	.. .. .	21.44	24.05	20.45	18.95	22.36	112	95	88	104
	Congenital malformations (750-759)										
	Total causes mainly of prenatal and natal origin, other than congenital malformations	4.44	4.35	4.25	4.37	4.81	98	96	98	108	
	.. .. .	10.98	11.20	11.01	10.43	11.28	102	100	95	103
	Prenatal and natal group (including congenital malformations)	Intracranial and spinal injury at birth (760)	1.86	1.87	1.80	1.84	1.93	101	97	99	104
		Other birth injury (including maternal antepartum haemorrhage) (761)	0.66	0.64	0.66	0.68	0.66	97	100	103	100
Postnatal asphyxia and atelectasis (762)		3.26	3.40	3.16	3.24	3.25	104	97	99	100	
Attributed to maternal toxæmia (769)		0.26	0.28	0.25	0.23	0.30	108	96	88	115	
Erythroblastosis (770)		0.41	0.41	0.44	0.38	0.42	100	107	93	102	
Haemorrhagic disease of newborn (771)		0.23	0.20	0.27	0.22	0.24	87	117	96	104	
Ill-defined diseases of early infancy (773)		0.56	0.57	0.55	0.50	0.62	102	98	89	111	
Immaturity alone, or primary to diseases other than of early infancy (774, 776)		3.73	3.83	3.87	3.35	3.86	103	104	90	103	
Total causes mainly of postnatal origin		4.98	7.36	4.18	3.22	5.16	148	84	65	104	
Postnatal group		Causes classified as infective (001-138); others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768)	0.65	0.98	0.59	0.43	0.61	151	91	66	94
	Pneumonia and bronchitis (490-493, 763, 500-502)	3.24	5.00	2.60	1.90	3.48	154	80	59	107	
	Gastro-enteritis and diarrhoea of the newborn (571, 764)	0.48	0.70	0.43	0.40	0.37	146	90	83	77	
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	0.42	0.47	0.36	0.36	0.50	112	86	86	119	
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)	0.09	0.09	0.12	0.05	0.08	100	133	56	89	
	Other violent causes (rem. E800-E999)	0.10	0.12	0.09	0.08	0.12	120	90	80	120	
	Total causes remaining	1.04	1.14	1.01	0.92	1.10	110	97	88	106	
Unclassified	Neoplasms (140-239)	0.09	0.08	0.09	0.12	0.08	89	100	133	89	
	Other remaining causes	0.95	1.06	0.92	0.80	1.02	112	97	84	107	
Immaturity, or with mention of immaturity (774, 776, 760.5-773.5)											
Immaturity alone, or primary to diseases other than of early infancy (774, 776)											
Immaturity associated with diseases of early infancy (760.5-773.5)											
All other causes											

Table LXIX. Infant deaths at various ages per 1,000 live births, and combined stillbirths and infant deaths per 1,000 total births, in standard regions, conurbations, and urban and rural aggregates within regional groups, 1961, England and Wales

Infant mortality per 1,000 live births										Stillbirths and infant deaths. Rates per 1,000 total births					
	Total infant mortality (under 1 year)	Neo-natal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths under 1 year	Stillbirths (late foetal deaths at 28 weeks' gestation)	Stillbirths plus infant deaths under 1 week	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
						Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year					
ENGLAND AND WALES															
Urban and rural aggregates:	21.44	15.34	13.27	2.06	6.10	7.61	5.66	2.40	2.02	1.68	40.05	19.02	32.04	8.01	34.06
Conurbations	22.38	16.07	14.03	2.04	6.31	8.34	5.69	2.49	2.20	1.61	40.65	18.69	32.46	8.19	34.46
Areas outside conurbations:															
Urban areas with populations of 100,000 and over	23.40	16.67	14.26	2.41	6.73	8.14	6.11	2.88	2.07	1.78	42.46	19.52	33.50	8.96	35.86
Urban areas with populations of 50,000 and under 100,000 ..	21.35	15.39	13.46	1.93	5.97	7.90	5.56	2.17	1.90	1.90	40.92	20.00	33.18	7.74	35.08
Urban areas with populations under 50,000	20.78	14.71	12.63	2.08	6.07	7.08	5.55	2.40	1.88	1.78	39.75	19.37	31.76	7.99	33.80
Rural districts	19.18	13.79	11.86	1.93	5.39	6.40	5.46	2.00	1.85	1.55	37.35	18.53	30.17	7.18	32.06
NORTH OF ENGLAND															
.. .. .	24.29	16.90	14.41	2.49	7.39	8.36	6.05	3.06	2.43	1.90	44.76	20.98	35.08	9.67	37.52
Regions:															
Northern	23.18	16.50	13.71	2.80	6.68	7.48	6.23	2.75	2.05	1.88	44.38	21.70	35.11	9.27	37.84
East and West Ridings	24.13	16.35	14.14	2.21	7.78	8.46	5.68	3.18	2.43	2.17	43.71	20.06	33.92	9.79	36.09
North Western	24.94	17.43	14.92	2.51	7.51	8.74	6.18	3.14	2.61	1.75	45.58	21.17	35.78	9.80	38.23
Conurbations:															
Tyneside	23.59	16.72	14.19	2.52	6.88	7.38	6.81	3.15	2.08	1.64	45.15	22.08	35.96	9.19	38.43
West Yorkshire	23.75	15.60	13.80	1.79	8.15	8.56	5.24	3.21	2.71	2.23	42.73	19.44	32.98	9.75	34.74
South East Lancashire	25.36	17.70	14.95	2.75	7.65	9.09	5.86	3.25	2.69	1.72	45.06	20.22	34.87	10.20	37.56
Merseyside	26.86	18.29	15.98	2.31	8.57	9.08	6.90	3.60	2.92	2.04	48.27	22.01	37.63	10.64	39.89
Areas outside conurbations:															
Urban areas with populations of 100,000 and over	24.43	16.87	14.31	2.55	7.56	8.30	6.01	3.36	2.36	1.84	44.62	20.69	34.71	9.90	37.21
Urban areas with populations of 50,000 and under 100,000 ..	25.84	18.24	15.77	2.47	7.60	9.81	5.96	2.57	2.72	2.31	47.76	22.50	37.91	9.84	40.32
Urban areas with populations under 50,000	23.63	16.72	14.09	2.63	6.91	7.84	6.25	2.93	2.04	1.94	44.60	21.47	35.25	9.34	37.83
Rural districts	21.33	15.33	12.70	2.64	6.00	7.03	5.67	2.36	2.03	1.61	41.43	20.54	32.97	8.46	35.55

Table LXIX—continued

	Infant mortality per 1,000 live births										Stillbirths and infant deaths. Rates per 1,000 total births			
	Neonatal mortality			Early neonatal period		Post-neonatal period			Stillbirths plus infant deaths at 1 year		Stillbirths (late foetal deaths at 28 weeks gestation) plus infant deaths at 1 year		Infant deaths at 1 week and over	
	Total infant mortality (under 1 year)	Neo-natal mortality (under 4 weeks)	Early neonatal mortality (under 1 week)	Late neonatal mortality (1 week and under 4 weeks)	Post-neonatal mortality (4 weeks and under 1 year)	Under 1 day	1 day and under 1 week	4 weeks and under 3 months	3 months and under 6 months	6 months and under 1 year	Stillbirths plus infant deaths at 1 year	Stillbirths (late foetal deaths at 28 weeks gestation) plus infant deaths at 1 year	Infant deaths at 1 week and over	Stillbirths plus infant deaths under 4 weeks
WALES AND MIDLANDS	21·81	15·62	13·36	2·26	6·19	7·50	5·86	2·40	2·03	1·76	41·74	20·37	33·46	35·67
Regions:														
Wales	24·02	17·45	14·63	2·83	6·57	7·41	7·21	2·85	2·14	1·58	45·89	22·41	36·71	39·48
North Midland	19·91	14·36	12·33	2·03	5·56	7·11	5·22	2·09	1·88	1·58	39·13	19·61	31·70	33·69
Midland	22·09	15·62	13·48	2·14	6·47	7·82	5·66	2·39	2·10	1·98	41·54	19·89	33·10	35·20
Conurbation:														
West Midlands	22·54	16·27	14·08	2·19	6·27	8·46	5·62	2·17	2·21	1·90	41·77	19·67	33·48	35·62
Areas outside conurbation:														
Urban areas with populations of 100,000 and over	25·25	18·16	15·37	2·80	7·09	8·47	6·90	3·07	2·06	1·95	45·13	20·40	35·45	38·19
Urban areas with populations of 50,000 and under 100,000	20·63	14·51	12·41	2·10	6·13	6·61	5·80	2·74	1·85	1·53	42·09	21·91	34·05	36·10
Urban areas with populations under 50,000	21·15	15·01	12·68	2·33	6·13	7·26	5·42	2·42	2·02	1·69	41·79	21·09	33·51	35·79
Rural districts	19·63	14·10	12·20	1·89	5·54	6·38	5·82	1·99	1·91	1·63	39·04	19·80	31·76	33·61
SOUTH AND EAST OF ENGLAND (excluding Greater London)	18·74	13·48	11·85	1·63	5·26	6·64	5·21	1·96	1·68	1·62	35·46	17·04	28·68	30·29
Regions:														
London and South Eastern (excluding Greater London)	19·21	13·82	12·08	1·73	5·39	7·17	4·91	2·15	1·47	1·78	35·23	16·33	28·21	29·92
Southern	19·49	13·69	12·03	1·66	5·80	7·08	4·95	1·99	1·86	1·95	35·42	16·24	28·07	29·71
South Western	18·36	13·24	11·64	1·60	5·12	6·23	5·41	1·83	1·69	1·60	36·28	18·26	29·68	31·25
Eastern	18·15	13·29	11·72	1·57	4·86	6·28	5·44	1·92	1·67	1·27	34·95	17·11	28·63	30·17
Urban areas with populations of 100,000 and over	20·62	14·96	13·08	1·88	5·65	7·68	5·40	2·27	1·83	1·55	37·87	17·61	30·46	32·32
Urban areas with populations of 50,000 and under 100,000	18·68	13·86	12·36	1·50	4·81	7·17	5·19	1·67	1·37	1·78	35·86	17·51	29·66	31·13
Urban areas with populations under 50,000	18·66	13·19	11·64	1·55	5·47	6·46	5·19	2·05	1·68	1·74	35·13	16·79	28·23	29·76
Rural districts	17·96	12·93	11·28	1·65	5·03	6·13	5·15	1·84	1·72	1·47	34·50	16·84	27·93	29·55
GREATER LONDON	19·98	15·03	13·34	1·69	4·95	7·97	5·37	1·89	1·80	1·26	36·25	16·60	29·72	31·39

Table LXX. Infant deaths per 1,000 live births in regional causes of infant mortality; regional group rates as percentages of corresponding national rates, 1961, England and Wales

Aetiological group	Cause of death (and ICD No.)	Rates per 1,000 live births					Regional group rates per cent of England and Wales rate			
		England and Wales				Greater London	North of England	Wales and Midlands	South and East of England (excluding Greater London)	Greater London
		21·44	24·29	21·81	18·74					
Prenatal and natal group (including congenital malformations)	All causes	..	..	..	..	19·98	113	102	87	93
	Congenital malformations (750-759)	4·44	4·94	4·52	4·17	3·85	111	102	94	87
	Total causes mainly of prenatal and natal origin other than congenital malformations	10·98	12·08	10·85	9·67	11·21	110	99	88	102
	Intracranial and spinal injury at birth (760)	1·86	2·19	2·00	1·49	1·63	118	108	80	88
	Other birth injury (including maternal antepartum haemorrhage) (761)	0·66	0·56	0·66	0·67	0·82	85	100	102	124
	Postnatal asphyxia and atelectasis (762)	3·26	3·51	3·35	2·79	3·43	108	103	86	105
	Attributed to maternal toxæmia (769)	0·26	0·20	0·30	0·24	0·35	77	115	92	135
	Erythroblastosis (770)	0·41	0·46	0·37	0·39	0·43	112	90	95	105
	Haemorrhagic disease of newborn (771)	0·23	0·30	0·20	0·18	0·24	130	87	78	104
	Ill-defined diseases of early infancy (773)	0·56	0·58	0·55	0·43	0·75	104	98	77	134
Postnatal group	Immaturity alone, or primary to diseases other than of early infancy (774, 776)	3·73	4·26	3·42	3·48	3·57	114	92	93	96
	Total causes mainly of postnatal origin	4·98	6·11	5·36	3·97	3·96	123	108	80	80
	Causes classified as infective (001-138) and others mainly infective in origin (340, 391-393, 470-483, 518, 519, 690-698, 765-768)	0·65	0·76	0·66	0·62	0·48	117	102	95	74
	Tuberculosis, other than tuberculous meningitis (001-008, 011-019)	0·01	0·00	0·01	0·00	0·01	40	100	50	100
	Tuberculous meningitis (010)	0·01	0·02	0·01	—	0·01	200	100	—	100
	Septicaemia, skin and subcutaneous tissue infections and sepsis of newborn (053, 690-698, 763-768)	0·12	0·13	0·11	0·12	0·13	108	92	100	108
	Whooping cough and measles (056, 085)	0·06	0·06	0·05	0·08	0·04	100	83	133	67

Table LXX—continued

Aetiological group	Cause of death (and ICD No.)	Rates per 1,000 live births					Regional group rates per cent of England and Wales rate			
		England and Wales	North of England	Wales and Midlands	South and East of England (excluding Greater London)	Greater London	North of England	Wales and Midlands	South and East of England (excluding Greater London)	Greater London
Postnatal group—(contd.)	Meningococcal infections and non-meningococcal meningitis (057, 340)	0.26	0.33	0.24	0.24	0.17	127	92	92	65
	Causes classified as infective not specified above (rem. 001-138) ..	0.07	0.09	0.08	0.06	0.02	129	114	86	29
	Otitis media and mastoiditis, empyema and pleurisy (391-393, 518, 519)	0.05	0.06	0.06	0.03	0.05	120	120	60	100
	Acute upper respiratory infections, and influenza (470-475, 480-483)	0.08	0.07	0.11	0.09	0.05	88	138	112	62
	Pneumonia and bronchitis (490-493, 763, 500-502)	3.24	3.97	3.54	2.38	2.84	123	109	73	88
	Gastro-enteritis (including diarrhoea of newborn) (571, 764)	0.48	0.72	0.53	0.26	0.31	150	110	54	65
	Accidental mechanical suffocation from vomit, food, foreign body, or in cot (E921-E925)	0.42	0.48	0.45	0.48	0.17	114	107	114	40
	Lack of care, neglect (including foundlings), infanticide (E926, E980-E985)	0.09	0.07	0.09	0.11	0.07	78	100	122	78
	Other violent causes (rem. E800-E999)	0.10	0.10	0.10	0.12	0.09	100	100	120	90
	Total causes remaining	1.04	1.16	1.08	0.93	0.95	112	104	89	91
Unclassified	Neoplasms (140-239)	0.09	0.07	0.10	0.12	0.10	78	111	133	111
	Other remaining causes	0.95	1.09	0.98	0.82	0.85	115	103	86	89
	Immaturity, or with mention of immaturity (774, 776, 760.5-773.5)	8.07	8.88	7.97	6.97	8.46	110	99	86	105
	Immaturity alone, or primary to diseases other than of early infancy (774, 776) ..	3.73	4.26	3.42	3.48	3.57	114	92	93	96
	Immaturity associated with diseases of early infancy (760.5-773.5)	4.34	4.62	4.55	3.49	4.88	106	105	80	112
All other causes		13.37	15.40	13.84	11.77	11.52	115	104	88	86

Table LXXI. Trend of stillbirths, per 1,000 total births, and of deaths in the neonatal, and post-neonatal periods per 1,000 live births, in standard regions, 1956 to 1961, England and Wales

		Rates in each year 1956 to 1961						Rates in 1957 to 1961 per cent of rate in 1956				
		1956	1957	1958	1959	1960	1961	1957	1958	1959	1960	1961
Stillbirths (at or over 28 weeks' gestation) per 1,000 total births	ENGLAND AND WALES	22.9	22.5	21.5	20.8	19.8	19.0	98	94	91	86	83
	NORTH OF ENGLAND	24.7	25.0	23.5	22.3	21.9	21.0	101	95	90	89	85
	Northern	24.8	25.6	23.0	22.4	22.3	21.7	103	93	90	90	88
	East and West Ridings ..	22.7	23.5	22.7	20.9	20.9	20.1	104	100	92	92	89
	North Western	25.8	25.7	24.4	23.2	22.3	21.2	100	95	90	86	82
	WALES AND MIDLANDS	25.0	23.4	23.8	23.1	21.4	20.4	94	95	92	86	82
	Wales	26.8	25.8	26.3	26.3	23.6	22.4	96	98	98	88	84
	North Midland	24.8	22.0	22.9	21.2	20.6	19.6	89	92	85	83	79
	Midland	24.1	23.0	23.0	22.9	20.9	19.9	95	95	95	87	83
	SOUTH AND EAST OF ENGLAND (excluding Greater London) ..	21.1	20.3	18.7	18.7	17.5	17.0	96	89	89	83	81
	London and South Eastern (excluding Greater London)	19.5	20.0	18.2	18.6	17.1	16.3	103	93	95	88	84
	Southern	20.9	19.3	17.4	18.1	16.2	16.2	92	83	87	78	78
	South Western	23.3	21.4	20.4	19.7	18.3	18.3	92	88	85	79	79
Neonatal mortality per 1,000 live births	Eastern	20.4	20.4	18.8	18.5	17.9	17.1	100	92	91	88	84
	GREATER LONDON ..	19.3	19.5	18.9	17.9	17.1	16.6	101	98	93	89	86
	ENGLAND AND WALES	16.8	16.5	16.2	15.9	15.5	15.3	98	96	95	92	91
	NORTH OF ENGLAND	18.6	17.7	18.1	17.5	17.1	16.9	95	97	94	92	91
	Northern	18.9	18.6	18.6	18.0	17.4	16.5	98	98	95	92	87
	East and West Ridings ..	18.5	17.2	17.2	16.7	16.0	16.4	93	93	90	86	89
	North Western	18.6	17.5	18.4	17.8	17.6	17.4	94	99	96	95	94
	WALES AND MIDLANDS	18.1	17.8	17.0	16.8	16.1	15.6	98	94	93	89	86
	Wales	20.6	20.0	18.9	19.6	18.7	17.5	97	92	95	91	85
	North Midland	16.9	16.4	15.8	15.2	14.8	14.4	97	93	90	88	85
	Midland	17.6	17.6	16.9	16.6	15.8	15.6	100	96	94	90	89
	SOUTH AND EAST OF ENGLAND (excluding Greater London) ..	14.9	14.8	13.9	13.6	13.6	13.5	99	93	91	91	91
	London and South Eastern (excluding Greater London)	14.9	14.6	13.4	13.7	13.2	13.8	98	90	92	89	93
Post-neonatal mortality per 1,000 live births	Southern	15.0	14.8	14.8	13.3	13.5	13.7	99	99	89	90	91
	South Western	15.0	15.7	14.7	13.6	14.4	13.2	105	98	91	96	88
	Eastern	14.8	14.1	13.1	13.6	13.3	13.3	95	89	92	90	90
	GREATER LONDON ..	14.5	14.8	14.7	15.1	14.8	15.0	102	101	104	102	103
	ENGLAND AND WALES	6.8	6.7	6.4	6.3	6.3	6.1	99	94	93	93	90
	NORTH OF ENGLAND	8.1	8.1	7.3	7.4	7.7	7.4	100	90	91	95	91
	Northern	8.1	8.2	7.0	7.2	7.2	6.7	101	86	89	89	83
	East and West Ridings ..	7.6	7.8	7.2	7.6	7.0	7.8	103	95	100	92	103
	North Western	8.3	8.3	7.6	7.4	8.3	7.5	100	92	89	100	90
	WALES AND MIDLANDS	7.4	7.2	6.9	6.7	6.6	6.2	97	93	91	89	84
	Wales	8.1	8.4	7.6	6.7	6.6	6.6	104	94	83	81	81
	North Midland	7.3	6.6	6.8	6.7	7.0	5.6	90	93	92	96	77
	Midland	7.1	7.0	6.7	6.8	6.2	6.5	99	94	96	87	92
	SOUTH AND EAST OF ENGLAND (excluding Greater London) ..	5.7	5.4	5.5	5.3	5.2	5.3	95	96	93	91	93
	London and South Eastern (excluding Greater London)	6.7	5.4	5.3	5.4	5.3	5.4	81	79	81	79	81
	Southern	5.5	5.4	5.5	5.6	5.3	5.8	98	100	102	96	105
	South Western	5.2	5.3	6.2	5.4	4.8	5.1	102	119	104	92	98
	Eastern	5.7	5.7	5.0	5.0	5.2	4.9	100	88	88	91	86
	GREATER LONDON ..	5.3	5.0	5.2	5.4	5.1	4.9	94	98	102	96	92

Table LXXII. Maternal mortality: Deaths from principal causes, and

ICD No.	MATERNAL MORTALITY (complications of pregnancy, childbirth and puerperium,								
	Puerperal phlebitis, thrombosis and embolism	Puerperal sepsis	Ante-partum haemorrhage	Post-partum haemorrhage	Toxaemia	Pro-longed labour	Trauma, shock: other complication of delivery	Other causes	Total maternal causes other than abortion
	682, 684	640, 641, 681	643, 644, 670	671, 672	642, 685, 686	673-675	676-678	Rem. 640-648 660-689	640-648 660-689
1931	215	712	330		494	507			2,258
1932	226	628	334		511	514			2,213
1933	206	694	310		508	533			2,251
1934	188	800	304		538	537			2,367
1935	192	647	292		488	507			2,126
1936	183	561	302		510	455			2,011
1937	152	347	307		510	457			1,773
1938	178	277	312		472	503			1,742
1939	154	248	117	179	478	467			1,643
1940	134	195	106	180	398	125	111	124	1,373
1941	134	141	101	210	381	155	109	122	1,353
1942	128	151	87	198	410	158	94	133	1,359
1943	136	132	86	187	375	165	106	112	1,299
1944	107	105	84	179	328	176	87	113	1,179
1945	86	82	68	158	321	148	72	92	1,027
1946	102	53	85	162	359	117	83	91	1,052
1947	110	33	56	156	312	110	63	77	917
1948	67	33	46	115	249	66	55	55	686
1949	56	32	38	90	199	69	60	65	609
1950	62	26	44	38	185	42	54	66	517
1951	49	16	35	53	141	38	37	50	419
1952	52	10	19	39	122	32	43	56	373
1953	49	17	39	51	143	31	34	55	419
1954	51	13	32	44	104	32	41	53	370
1955	55	17	24	41	91	31	23	57	339
1956	32	13	33	24	93	34	15	58	302
1957	32	18	27	22	77	27	23	46	272
1958	40	13	25	33	66	21	20	47	265
1959	30	17	21	23	57	18	26	51	243
1960	27	8	25	19	63	26	36	44	248
1961	24	6	20	23	55	15	32	45	220

* Note. *Excludes* the following cases in which it was stated that death followed the maternal 1955-34, 1956-25, 1957-16, 1958-22, 1959-21, 1960-26, 1961-11.

associated maternal mortality, 1931 to 1961, England and Wales

including abortion)						ASSOCIATED MATERNAL MORTALITY			Total attributed to, or associated with, maternal causes
Abortion				Abortion all forms	Total* maternal mortality	Associated with maternal causes other than abortion	Associated with abortion	Total associated mortality	
Criminal abortion		Spontaneous and other							
With sepsis	Without mention of sepsis	With sepsis	Without mention of sepsis						
651·2	650·2 652·2	Rem. 651	Rem. 650, 652	650-652	640-689				
52	27	229	140	448	2,706	834	77	911	3,617
46	23	262	139	470	2,683	623	90	713	3,396
56	29	257	144	486	2,737	731	97	828	3,565
67	33	295	118	513	2,880	683	64	747	3,627
64	30	262	108	464	2,590	638	74	712	3,302
49	24	242	105	420	2,431	541	70	611	3,042
56	28	176	109	369	2,142	585	104	689	2,831
54	26	173	101	354	2,096	449	81	530	2,626
80	28	167	79	354	1,997	429	49	478	2,475
43	33	116	76	268	1,641	368	56	424	2,065
66	24	145	90	325	1,678	358	47	405	2,083
64	12	175	62	313	1,672	363	49	412	2,084
76	15	166	64	321	1,620	437	57	494	2,114
75	7	168	63	313	1,492	383	52	435	1,927
65	9	109	50	233	1,260	342	19	361	1,621
41	5	69	42	157	1,209	353	37	390	1,599
37	3	54	49	143	1,060	264	44	308	1,368
34	4	55	32	125	811	231	16	247	1,058
20	9	58	31	118	727	157	19	176	903
25	21	39	18	103	620	180	21	201	821
33	26	34	14	107	526	151	9	160	686
19	28	28	15	90	463	153	8	161	624
17	24	22	13	76	495	121	7	128	623
10	25	22	19	76	446	116	5	121	567
17	15	19	15	66	405	108	7	115	520
20	16	20	16	72	374	119	6	125	499
15	15	18	13	61	333	122	6	128	461
8	12	27	16	63	328	94	4	98	426
13	10	16	8	47	290	75	7	82	372
12	18	21	11	62	310	70	5	75	385
8	15	24	7	54	274	68	3	71	345

condition after an interval of more than 12 months: 1951-40, 1952-35, 1953-32, 1954-34,

Table LXXIII. Maternal mortality, distinguishing principal causes, and
1931 to 1961,

ICD No.	MATERNAL MORTALITY (complications of pregnancy, childbirth and puerperium,								
	Puerperal phlebitis, thrombosis and embolism	Puerperal sepsis	Ante-partum haemorrhage	Post-partum haemorrhage	Toxaemia	Pro-longed labour	Trauma, shock: other complication of delivery	Other causes	Total maternal causes other than abortion
	682, 684	640, 641, 681	643, 644, 670	671, 672	642, 685, 686	673-675	676-678	Rem. 640-648 660-689	640-648 660-689
1931	33	108	50		75	77			343
1932	35	98	52		80	80			346
1933	34	115	51		84	88			372
1934	30	128	49		86	86			380
1935	31	104	47		78	81			341
1936	29	89	48		81	72			319
1937	24	55	48		80	72			279
1938	28	43	48		73	78			270
1939	24	39	18	28	75	73			257
1940	22	32	17	29	65	20	18	20	224
1941	22	24	17	35	64	26	18	20	226
1942	19	22	13	29	61	23	14	20	202
1943	19	19	12	27	53	23	15	16	184
1944	14	14	11	23	42	23	11	15	153
1945	12	12	10	23	46	21	10	13	147
1946	12	6	10	19	43	14	10	11	125
1947	12	4	6	17	35	12	7	9	102
1948	8	4	6	14	31	8	7	7	86
1949	7	4	5	12	27	9	8	9	81
1950	9	4	6	5	26	6	8	9	72
1951	7	2	5	8	20	5	5	7	60
1952	8	1	3	6	18	5	6	8	54
1953	7	2	6	7	20	4	5	8	60
1954	7	2	5	6	15	5	6	8	54
1955	8	2	4	6	13	5	3	8	50
1956	4	2	5	3	13	5	2	8	42
1957	4	2	4	3	10	4	3	6	37
1958	5	2	3	4	9	3	3	6	35
1959	4	2	3	3	7	2	3	7	32
1960	3	1	3	2	8	3	4	5	31
1961	3	1	2	3	7	2	4	5	27

Note. Figures for 1931 to 1938 are based on live and still birth registrations, and from

associated maternal mortality. Death rates per 100,000 total births,
England and Wales

including abortion)						ASSOCIATED MATERNAL MORTALITY			Total attributed to, or associated with, maternal causes
Abortion				Abortion all forms	Total* maternal mortality	Associated with maternal causes other than abortion	Associated with abortion	Total associated mortality	
Criminal abortion		Spontaneous and other							
With sepsis	Without mention of sepsis	With sepsis	Without mention of sepsis						
651·2	650·2 652·2	Rem. 651	Rem. 650, 652	650-652	640-689				
8	4	35	21	68	411	127	12	138	549
7	4	41	22	73	419	97	14	111	530
9	5	42	24	80	452	121	16	137	589
11	5	47	19	82	462	110	10	120	582
10	5	42	17	74	415	102	12	114	529
8	4	38	17	67	386	86	11	97	483
9	4	28	17	58	337	92	16	108	446
8	4	27	16	55	324	70	13	82	407
13	4	26	12	55	313	67	8	75	387
7	5	19	12	44	268	60	9	69	337
11	4	24	15	54	280	60	8	68	347
9	2	26	9	46	248	54	7	61	309
11	2	24	9	45	230	62	8	70	300
10	1	22	8	41	193	50	7	56	249
9	1	16	9	33	180	49	3	52	232
5	1	8	5	19	143	42	4	46	190
4	0	6	5	16	117	29	5	34	152
4	1	7	4	16	102	29	2	31	133
3	1	8	4	16	97	21	3	24	121
4	3	5	3	14	87	25	3	28	115
5	4	5	2	15	76	22	1	23	99
3	4	4	2	13	67	22	1	23	91
2	3	3	2	11	71	17	1	18	89
1	4	3	3	11	65	17	1	18	82
2	2	3	2	10	59	16	1	17	76
3	2	3	2	10	52	17	1	17	70
2	2	2	2	8	45	16	1	17	62
1	2	4	2	8	43	12	1	13	56
2	1	2	1	6	38	10	1	11	49
1	2	3	1	8	39	9	1	9	48
1	2	3	1	7	33	8	0	9	42

1939 onwards on occurrences.

* See footnote to Table LXXII.

Table LXXIV. Maternal mortality: Deaths attributed to or associated with abortion, 1931 to 1961, England and Wales

	Spontaneous or induced for therapeutic reasons		Induced for non-therapeutic reasons		Total attributed to abortion (including criminal)	Others associated with abortion	Total attributed to, or associated with, abortion	Percentage of deaths due to abortion which had mention of sepsis
	With sepsis	Without sepsis	With sepsis	Without sepsis*				
1931 ..	229	140	52	27	448	77	525	63
1932 ..	262	139	46	23	470	90	560	66
1933 ..	257	144	56	29	486	97	583	64
1934 ..	295	118	67	33	513	64	577	71
1935 ..	262	108	64	30	464	74	538	70
1936 ..	242	105	49	24	420	70	490	69
1937 ..	176	109	56	28	369	104	473	63
1938 ..	173	101	54	26	354	81	435	64
1939 ..	167	79	80	28	354	49	403	70
1940 ..	116	76	43	33	268	56	324	59
1941 ..	145	90	66	24	325	47	372	65
1942 ..	175	62	64	12	313	49	362	76
1943 ..	166	64	76	15	321	57	379	75
1944 ..	168	63	75	7	313	52	367	78
1945 ..	109	50	65	9	233	19	253	75
1946 ..	69	42	41	5	157	37	194	70
1947 ..	54	49	37	3	143	44	184	64
1948 ..	55	32	34	4	125	16	139	71
1949 ..	58	31	20	9	118	19	137	66
1950 ..	39	18	25	21	103	21	124	62
1951 ..	34	14	33	26	107	9	116	63
1952 ..	28	15	19	28	90	8	98	52
1953 ..	22	13	17	24	76	7	83	51
1954 ..	22	19	10	25	76	5	81	42
1955 ..	19	15	17	15	66	7	75	56
1956 ..	20	16	20	16	72	6	78	56
1957 ..	18	13	15	15	61	6	67	54
1958 ..	27	16	8	12	63	4	67	56
1959 ..	16	8	13	10	47	7	54	62
1960 ..	21	11	12	18	62	5	67	53
1961 ..	24	7	8	15	54	3	57	59

* Deaths due to attempted abortion, formerly classed to accidental causes, are included for years 1950 onwards.

Table LXXV. Deaths of women certified as due to pregnancy or childbearing, by age and cause, 1961, England and Wales

ICD No.	Cause of death	All ages	15-	20-	25-	30-	35-	40-	45 and over
640-648	Complications of pregnancy	82	3	22	19	14	15	8	1
640	Pyelitis and pyelonephritis of pregnancy ..	—	—	—	—	—	—	—	—
641	Other infections of genito-urinary tract during pregnancy	2	—	—	1	1	—	—	—
642	Toxaemias of pregnancy	46	3	15	11	8	6	2	1
643	Placenta praevia	—	—	—	—	—	—	—	—
644	Other haemorrhage of pregnancy	2	—	—	—	—	1	1	—
645	Ectopic pregnancy	12	—	2	1	2	4	3	—
646	Anaemia of pregnancy	1	—	—	—	1	—	—	—
647	Pregnancy with malposition of foetus in uterus	—	—	—	—	—	—	—	—
648	Other complications arising from pregnancy	19	—	5	6	2	4	2	—
650-652	Abortion	54	4	15	7	13	13	2	—
650	Abortion without mention of sepsis or toxaemia	18	2	7	—	4	5	—	—
651	Abortion with sepsis	32	2	7	7	7	7	2	—
652	Abortion with toxaemia, without mention of sepsis	4	—	1	—	2	1	—	—
660	Delivery without mention of complication ..	7	—	1	—	1	5	—	—
670-678	Delivery with specified complication	88	4	17	14	16	23	13	1
670	Delivery complicated by placenta praevia or antepartum haemorrhage	18	—	4	4	2	5	3	—
671	Delivery complicated by retained placenta	8	2	—	1	2	2	1	—
672	Delivery complicated by other post-partum haemorrhage	15	—	6	2	2	3	1	1
673	Delivery complicated by abnormality of bony pelvis	—	—	—	—	—	—	—	—
674	Delivery complicated by disproportion or malposition of foetus	8	1	2	—	1	3	1	—
675	Delivery complicated by prolonged labour of other origin	7	—	2	1	1	3	—	—
676	Delivery with laceration of perineum, without mention of other laceration ..	—	—	—	—	—	—	—	—
677	Delivery with other trauma	12	—	—	2	2	5	3	—
678	Delivery with other complications of childbirth	20	1	3	4	6	2	4	—
680-689	Complications of the puerperium	43	4	10	8	10	5	6	—
680	Puerperal urinary infection without other sepsis	—	—	—	—	—	—	—	—
681	Sepsis of childbirth and the puerperium ..	4	1	1	1	—	—	1	—
682	Puerperal phlebitis and thrombosis	23	2	5	2	6	4	4	—
683	Pyrexia of unknown origin during the puerperium	—	—	—	—	—	—	—	—
684	Puerperal pulmonary embolism	1	—	—	—	—	—	1	—
685	Puerperal eclampsia	8	—	2	4	2	—	—	—
686	Other forms of puerperal toxaemia	1	—	1	—	—	—	—	—
687	Cerebral haemorrhage in the puerperium ..	5	—	1	1	2	1	—	—
688	Other and unspecified complications of the puerperium	—	—	—	—	—	—	—	—
689	Mastitis and other disorders of lactation ..	1	1	—	—	—	—	—	—
640-648 660-689	Deliveries and complications of pregnancy, childbirth, and the puerperium (excluding abortion)	220	11	50	41	41	48	27	2
640-689	Deliveries and complications of pregnancy, childbirth, and the puerperium (including abortion)	274	15	65	48	54	61	29	2

Note: Excludes 11 cases in which it was stated that death followed the maternal condition after an interval of more than 12 months.

Table LXXVI. Deaths of women not classed to pregnancy or childbearing but certified as associated therewith, 1961, England and Wales

ICD No.	Cause of death	All ages	15-	20-	25-	30-	35-	40-	45 and over
010	Tuberculous meningitis	1	—	1	—	—	—	—	—
096·9	Virus infection	1	—	1	—	—	—	—	—
140-199	Malignant neoplasms	3	—	—	1	1	—	1	—
204·0	Lymphatic leukaemia	1	—	—	—	—	1	—	—
214	Uterine fibroids	1	—	—	—	—	—	1	—
241	Status asthmaticus	1	—	—	—	—	1	—	—
290·2	Megaloblastic anaemia	1	—	—	—	1	—	—	—
298·0	Banti's disease	1	—	—	—	—	1	—	—
330-334	Vascular lesions affecting the central nervous system	3	—	—	1	—	—	2	—
342	Cerebral abscess	1	—	—	—	—	1	—	—
391·2	Otitis media	1	—	—	1	—	—	—	—
401·0	Rheumatic chorea	1	—	—	—	1	—	—	—
410	Diseases of mitral valve	12	1	2	4	2	1	2	—
414	Rheumatic endocarditis	2	—	—	—	1	1	—	—
416	Rheumatic heart disease	4	—	—	—	—	3	1	—
422·0	Fatty degeneration	1	—	—	—	1	—	—	—
430·0	Vegetation of mitral valve	1	—	—	1	—	—	—	—
431	Acute myocarditis not specified as rheumatic	2	—	1	—	—	1	—	—
444	Hypertension	1	—	—	—	—	—	1	—
480-483	Influenza	7	—	3	1	2	—	1	—
490-493	Pneumonia	5	—	—	4	—	—	1	—
518	Empyema	1	—	—	1	—	—	—	—
526	Bronchiectasis	2	—	—	1	1	—	—	—
527	Emphysema	1	—	—	—	—	—	1	—
541·0	Duodenal ulcer	2	—	—	—	1	—	1	—
550·1	Appendicitis, perforated	1	—	—	—	1	—	—	—
570·2	Mesenteric thrombosis	2	—	—	2	—	—	—	—
571·1	Enterocolitis	1	—	1	—	—	—	—	—
744·0	Myasthenia gravis	1	—	—	—	—	1	—	—
754·1	Patent ductus arteriosus	1	—	—	1	—	—	—	—
E800- E999	Accidents, poisonings, violence	8	—	4	2	1	1	—	—
Total		71	1	13	20	13	12	12	—
Associated with abortion (included above)		3	—	—	—	1	2	—	—

Table LXXVII. Tuberculosis of the respiratory system: Death rates per million living, by sex and age, 1931 to 1961, England and Wales

	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over
Males											
1931-35 ..	85	42	64	490	963	961	1,140	1,368	1,176	723	275
1936-40 ..	61	20	44	366	742	785	937	1,210	1,216	718	296
1941-45 ..	76	24	34	339	581	674	811	1,114	1,203	741	295
1946 ..	68	22	23	239	481	615	687	1,020	1,165	768	340
1947 ..	77	15	29	241	500	632	679	1,034	1,213	812	267
1948 ..	56	10	14	211	445	603	633	961	1,166	881	334
1949 ..	33	6	13	127	368	496	591	869	1,153	937	380
1949* ..	34	7	14	127	366	497	592	869	1,159	937	400
1950* ..	38	9	8	78	229	395	428	751	1,024	891	411
1951* ..	30	7	7	46	171	292	364	636	978	953	464
1952* ..	15	4	10	35	102	201	287	503	829	843	447
1953* ..	14	4	3	18	71	156	214	413	712	814	445
1954* ..	9	2	1	13	55	130	192	370	643	778	406
1955* ..	3	1	1	8	30	93	131	307	535	705	420
1956* ..	7	1	2	7	14	71	113	231	456	640	463
1957* ..	3	—	2	3	12	40	105	193	410	605	436
1958* ..	3	1	2	6	13	38	85	166	401	572	416
1959* ..	4	—	—	2	6	31	73	141	325	528	480
1960* ..	1	—	—	3	1	20	55	121	297	492	436
1961* ..	3	—	1	—	3	12	57	117	271	474	417
Females											
1931-35 ..	74	43	143	840	1,138	911	646	475	394	306	170
1936-40 ..	55	24	98	658	1,016	759	511	377	339	272	160
1941-45 ..	72	24	76	591	916	692	427	304	269	220	123
1946 ..	60	25	69	468	842	662	382	261	242	207	119
1947 ..	70	24	63	502	899	730	411	267	249	224	133
1948 ..	52	19	53	462	812	702	367	255	235	218	105
1949 ..	33	9	30	349	684	622	348	253	245	229	127
1949* ..	33	10	30	351	682	622	348	254	249	236	139
1950* ..	29	8	15	199	429	444	273	229	212	212	144
1951* ..	25	8	14	108	278	347	238	192	180	198	135
1952* ..	18	5	6	58	169	230	166	131	148	150	159
1953* ..	17	5	3	32	122	174	146	116	130	162	140
1954* ..	11	2	3	31	84	143	145	104	107	137	117
1955* ..	6	2	4	12	56	113	101	84	95	111	115
1956* ..	4	1	—	6	35	80	79	62	70	111	125
1957* ..	4	1	—	6	12	70	75	53	55	80	91
1958* ..	3	1	1	6	14	48	58	51	69	99	101
1959* ..	4	1	1	2	7	33	44	46	53	86	95
1960* ..	3	1	1	3	3	26	40	42	44	77	91
1961* ..	—	—	—	3	4	21	39	45	52	70	93

* According to the Seventh (1955) Revision of the International List. Throughout the rest of the table rates are according to the Fifth (1938) Revision.

Table LXXVIII. Tuberculosis of the respiratory system: Notification rates* per 100,000 living, by sex and age, 1938 to 1961, England and Wales

	All ages	0-	5-	15-	25-	35-	45-	65 and over
Males								
1938	108	20	42	141	137	136	136	52
1939	98	17	32	132	124	124	125	46
1940	104	17	29	145	146	128	123	43
1941	115	20	33	154	155	148	141	50
1942	117	22	38	165	148	153	142	49
1943	119	27	40	166	144	154	152	50
1944	122	30	41	180	158	142	149	56
1945	118	32	40	178	160	135	142	53
1946	119	32	46	179	174	125	138	54
1947	118	40	53	193	163	116	137	56
1948	117	44	51	215	161	117	139	64
1949	119	46	49	180	159	122	146	68
1950	111	53	49	159	154	107	135	67
1951	115	53	48	170	156	117	141	72
1952	112	52	51	165	147	116	135	77
1953	110	49	49	155	133	114	139	85
1954	100	41	40	143	125	106	126	82
1955	92	36	34	125	110	96	121	81
1956	88	29	28	115	101	92	121	87
1957	82	26	23	99	97	90	114	87
1958	76	25	21	89	86	81	108	87
1959	70	21	17	70	79	79	102	89
1960	60	24	15	59	65	68	88	77
1961	55	18	15	48	60	61	83	74
Females								
1938	77	18	42	175	129	72	42	19
1939	71	15	33	166	116	68	37	18
1940	70	17	30	168	120	66	35	16
1941	76	19	33	185	126	69	41	19
1942	78	20	34	204	130	70	37	18
1943	83	26	40	209	142	73	40	18
1944	86	26	40	227	150	75	38	16
1945	81	26	41	223	140	69	34	16
1946	80	28	49	213	141	65	35	16
1947	83	33	51	235	146	66	35	17
1948	86	46	58	244	151	68	35	17
1949	85	44	53	238	155	71	35	17
1950	82	43	52	238	152	69	31	16
1951	81	50	52	229	149	68	33	16
1952	80	49	53	216	148	71	35	16
1953	77	45	52	201	141	73	34	18
1954	68	37	44	187	124	63	30	17
1955	60	35	38	156	112	59	30	17
1956	55	30	31	139	101	57	29	18
1957	49	30	27	116	90	55	29	17
1958	43	25	24	97	79	47	26	17
1959	39	22	19	83	69	49	25	16
1960	33	20	18	63	60	39	23	15
1961	29	18	16	52	50	37	21	14

* Notifications of tuberculosis used in this and subsequent tables for 1956 onwards are those returned to the General Register Office, and not, as in previous years, those returned to the Ministry of Health. There is a small but insignificant difference between the figures from the two sources. Cases of unstated age are omitted for 1956 onwards.

Table LXXIX. Tuberculosis of the respiratory system: Ratio of deaths to 100 notifications*, by sex and age, 1938 to 1961, England and Wales

		Males						Females					
		All ages	0-	15-	25-	45-	65 and over	All ages	0-	15-	25-	45-	65 and over
1938	..	60	13	38	60	85	112	55	16	45	60	80	115
1939	..	67	14	38	64	96	133	59	19	46	65	93	124
1940	..	65	15	35	61	100	139	64	23	53	68	96	139
1941	..	59	20	33	55	87	121	59	26	48	65	81	110
1942	..	52	13	27	48	78	121	50	18	39	55	79	106
1943	..	53	13	25	48	81	121	46	16	35	51	73	102
1944	..	48	11	22	44	76	110	42	15	30	47	70	111
1945	..	48	11	22	44	76	118	44	16	31	51	76	117
1946	..	47	10	18	42	78	119	43	12	31	51	72	110
1947	..	47	9	17	45	81	116	44	12	30	54	74	114
1948	..	46	6	16	43	75	112	39	8	27	49	71	107
1949	..	42	4	13	38	68	112	35	5	22	43	71	114
1950	..	38	4	9	31	64	111	28	4	13	33	70	116
1951	..	33	3	6	24	55	112	22	3	9	27	56	110
1952	..	27	2	4	19	47	93	16	2	5	18	40	96
1953	..	23	2	3	15	38	82	14	2	4	15	36	85
1954	..	23	1	2	14	38	80	14	1	3	15	35	77
1955	..	21	0	2	12	33	76	12	1	2	13	29	66
1956	..	19	1	1	10	27	67	10	0	2	10	23	66
1957	..	18	1	1	8	25	63	10	1	1	10	19	51
1958	..	18	1	1	7	25	60	11	1	1	9	23	60
1959	..	17	1	1	7	22	58	9	1	1	7	19	55
1960	..	18	0	0	6	22	61	10	1	0	7	19	54
1961	..	18	1	0	6	22	62	11	—	1	7	23	55

* See footnote to Table LXXVIII.

Table LXXX. Tuberculosis of the respiratory system: Death rates per million living by sex and age, and notifications* per 100 deaths in standard regions, conurbations, and urban and rural aggregates within regional groups, 1961, England and Wales

	Males							Females							Persons	
	All ages	0—	5—	15—	25—	45—	65 and over	All ages	0—	5—	15—	25—	45—	65 and over	All ages	Notifi- cations per 100 deaths
ENGLAND AND WALES	100	3	0	2	35	185	455	32	—	—	3	31	48	79	65	639
Urban and rural aggregates:																
Conurbations	114	4	1	—	33	203	593	33	—	—	2	29	51	88	72	739
<i>Areas outside conurbations:</i>																
Urban areas with populations of 100,000 and over	125	—	—	8	54	222	581	38	—	—	—	53	54	79	80	557
Urban areas with populations of 50,000 and under 100,000	101	7	—	4	22	216	406	35	—	—	4	41	50	75	67	532
Urban areas with populations of 50,000	92	2	—	—	34	168	386	28	—	—	3	22	45	67	59	592
Rural districts	70	3	—	7	33	135	279	29	—	—	9	25	41	79	50	578
NORTH OF ENGLAND	112	5	—	1	37	214	505	34	—	—	6	37	55	73	72	586
Regions:																
Northern	97	—	—	—	47	187	432	36	—	—	9	39	54	98	66	727
East and West Ridings	107	12	—	—	40	184	508	34	—	—	11	51	44	62	69	590
North Western	123	4	—	2	30	247	540	33	—	—	2	27	62	69	76	522
Conurbations	122	7	—	—	39	240	561	37	—	—	2	36	61	82	77	658
Tyneside	97	—	—	—	53	194	389	43	—	—	16	27	54	167	69	1,015
West Yorkshire	117	14	—	—	41	196	539	31	—	—	—	54	40	46	72	731
South East Lancashire	111	10	—	—	41	225	441	32	—	—	—	9	63	91	70	621
Merseyside	164	—	—	—	23	361	960	47	—	—	—	66	91	67	103	490
<i>Areas outside conurbations:</i>																
Urban areas with populations of 100,000 and over	146	—	—	9	58	252	714	50	—	—	—	80	68	93	96	485
Urban areas with populations of 50,000 and under 100,000	117	22	—	—	35	251	425	32	—	—	—	42	46	64	73	455
Urban areas with populations under 50,000	94	—	—	—	24	168	446	27	—	—	5	27	43	59	59	573
Rural districts	73	—	—	—	32	147	308	25	—	—	33	13	43	49	49	520

WALES AND MIDLANDS

Regions:	..	111	4	—	3	50	210	485	31	—	—	—	27	47	94	71	589
Wales:	..	161	—	—	6	68	296	659	42	—	—	—	42	55	128	101	488
North Midland ..	..	79	7	—	4	44	129	353	23	—	—	—	19	49	45	51	655
South Midland ..	..	109	5	—	—	46	222	485	31	—	—	—	25	42	115	69	632
Conurbation:	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
West Midlands ..	..	119	10	—	—	38	262	527	26	—	—	—	24	30	96	71	827

Areas outside conurbation:	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Urban areas with populations of 100,000 and over ..	..	145	—	—	—	75	279	624	37	—	—	—	29	60	107	89	527
Urban areas with populations of 50,000 and under 100,000 ..	..	77	—	—	23	11	142	381	35	—	—	—	22	58	113	56	658
Urban areas with populations under 50,000 ..	..	121	8	—	—	53	197	576	31	—	—	—	27	51	83	75	478
Rural districts ..	..	80	—	—	4	50	149	307	31	—	—	—	28	45	93	56	555

SOUTH AND EAST OF ENGLAND (excluding Greater London)

Regions:	..	74	2	—	2	24	147	294	29	—	—	—	4	31	41	68	51	657
London and South Eastern (excluding Greater London) ..	..	102	—	—	—	29	201	356	32	—	—	—	6	22	43	80	64	551
Southern ..	..	61	—	—	—	17	142	239	26	—	—	—	—	34	36	58	43	505
South Western ..	..	80	8	—	8	33	143	314	37	—	—	—	5	43	43	58	58	591
Eastern ..	..	59	—	—	—	18	114	262	23	—	—	—	4	25	40	38	40	756

Urban areas with populations of 100,000 and over ..	..	90	—	—	13	29	144	451	31	—	—	—	—	54	37	50	59	691
Urban areas with populations of 50,000 and under 100,000 ..	..	100	—	—	—	18	223	408	37	—	—	—	9	48	50	70	67	545
Urban areas with populations under 50,000 ..	..	69	5	—	—	27	146	230	26	—	—	—	4	16	43	63	46	737
Rural districts	62	—	—	—	21	122	251	29	—	—	—	4	28	37	82	46	621

GREATER LONDON ..

..	..	107	—	2	—	28	158	635	33	—	—	—	2	26	49	90	68	785
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* See footnote to Table LXXVIII.

Table LXXXI. Tuberculosis of the respiratory system: Notification rates* per 100,000 living, by sex and age, in standard regions, 1961, England and Wales

		Males						Females						Persons	
														All ages	
All ages	0-	5-	15-	25-	45-	65 and over	All ages	0-	5-	15-	25-	45-	65 and over		
ENGLAND AND WALES	55	18	15	48	61	83	74	29	18	16	52	43	21	14	42
Standard regions:															
Northern	62	30	18	55	62	99	82	35	21	20	71	49	26	16	48
East and West Ridings	58	15	13	52	70	83	74	25	13	18	41	41	18	8	41
North Western	54	13	13	49	53	86	70	26	17	14	50	43	17	12	40
North Midland	43	11	11	39	47	70	51	23	15	12	40	36	16	13	33
Midland	58	26	18	55	69	86	55	30	22	24	51	43	19	13	43
Eastern	39	13	9	40	45	56	46	23	11	14	39	37	15	11	31
London and South Eastern	66	20	15	63	70	95	100	33	23	17	65	47	24	17	49
Southern	45	24	13	29	54	67	70	25	14	12	42	38	21	14	35
South Western	42	10	16	29	47	64	55	27	10	18	45	41	22	17	34
Wales	64	21	18	43	63	100	100	35	25	12	55	48	34	22	49
Wales I (South East)	60	22	17	48	58	96	91	34	22	12	59	45	33	20	47
Wales II (remainder)	73	17	21	33	76	112	120	38	33	13	46	57	38	26	55

* See footnote to Table LXXVIII.

Table LXXXII. Tuberculosis of the respiratory system: Ratio of deaths to 100 notifications*, by sex and age, in standard regions, 1961, England and Wales

	Deaths per 100 notifications							
	Males				Females			
	15–	25–	45–	65 and over	15–	25–	45–	65 and over
ENGLAND AND WALES ..	0	6	22	62	1	7	23	55
Standard regions:								
Northern	—	8	19	53	1	8	21	63
East and West Ridings ..	—	6	22	69	3	13	24	75
North Western	1	5	29	77	0	6	37	58
North Midland	1	9	18	70	—	5	30	35
Midland	—	7	26	88	—	6	22	88
Eastern	—	4	20	57	1	7	26	35
London and South Eastern ..	—	4	18	55	0	5	19	51
Southern	—	3	21	34	—	9	17	42
South Western	3	7	22	57	1	11	19	56
Wales (including Monmouthshire)	1	11	30	66	—	9	16	58
Wales I (South East) ..	2	9	31	75	—	11	16	54
Wales II (remainder) ..	—	15	26	50	—	4	16	63

* See footnote to Table LXXVIII.

Table LXXXIII. Tuberculosis of the respiratory system: Standardised Mortality Ratios and standardised notification ratios*, by sex, in standard regions, conurbations, and urban and rural aggregates, 1961, England and Wales

	Males		Females	
	S.M.R.	S.N.R.	S.M.R.	S.N.R.
ENGLAND AND WALES	100	100	100	100
Regions and conurbations:				
Northern	101	114	122	122
Tyneside Conurbation	101	171	144	167
Remainder of Northern	101	94	114	105
East and West Ridings	106	104	109	88
West Yorkshire Conurbation	113	140	95	104
Remainder of East and West Ridings	102	81	120	77
North Western	123	98	104	92
South East Lancashire Conurbation	111	109	100	98
Merseyside Conurbation	187	132	159	112
Remainder of North Western	106	74	82	76
North Midland	79	79	75	80
Midland	116	107	103	102
West Midlands Conurbation	128	147	85	130
Remainder of Midland	104	69	121	74
Eastern	58	71	70	79
London and South Eastern	102	118	98	115
Greater London	106	128	101	128
Remainder of London and South Eastern	91	92	91	79
Southern	63	84	82	88
South Western	76	76	112	97
Wales (including Monmouthshire)	156	115	134	122
Wales I (South East)	155	109	130	117
Wales II (remainder)	158	132	143	134
Urban and rural aggregates:				
Conurbations	116	132	104	122
<i>Areas outside conurbations:</i>				
Urban areas with populations of 100,000 and over	127	109	121	106
Urban areas with populations of 50,000 and under 100,000	100	84	108	90
Urban areas with populations under 50,000	88	85	86	83
Rural districts	69	64	92	79

* See footnote to Table LXXVIII.

Table LXXXIV. Non-respiratory tuberculosis: Death rates per million living, by sex and age, 1938 to 1961, England and Wales

	Males					Females				
	All ages	0–	15–	25–	45 and over	All ages	0–	15–	25–	45 and over
1938–40	117	221	136	79	67	93	201	121	59	46
1941–45	131	236	195	98	62	96	213	141	59	45
1946	93	180	120	60	54	75	165	107	50	35
1947	87	179	96	53	52	73	153	109	48	35
1948	72	134	79	45	52	62	130	84	41	34
1949	62	107	69	41	46	47	92	60	34	29
1950	47	75	44	34	40	40	76	54	22	29
1951	44	70	38	33	37	37	69	44	21	30
1952	33	43	27	23	36	24	38	25	16	23
1953	24	29	17	18	30	21	30	18	12	23
1954	21	16	15	18	30	17	13	15	12	22
1955	17	11	12	14	26	13	14	5.3	8.5	18
1956	13	7.3	4.4	11	20	11	5.6	7.6	9.2	16
1957	12	7.2	6.5	11	19	12	8.6	6.5	8.0	17
1958	12	5.4	7.1	9.4	20	9.5	5.8	3.2	6.1	16
1959	8.7	6.0	2.1	6.3	15	8.1	4.5	2.8	5.4	13
1960	7.2	2.4	2.4	5.7	14	7.2	2.5	2.7	5.1	12
1961	7.4	1.5	4.2	6.3	14	7.0	3.9	4.0	3.1	12

Table LXXXV. Non-respiratory tuberculosis: Notification rates* per million living, by sex and age, 1938 to 1961, England and Wales

	Males					Females				
	All ages	0–	15–	25–	45 and over	All ages	0–	15–	25–	45 and over
1938–40	290	744	341	151	72	264	641	403	172	61
1941–45	269	698	326	148	64	261	632	413	178	63
1946	217	569	250	123	53	210	518	334	149	47
1947	202	518	227	114	54	196	455	317	144	51
1948	197	505	243	99	53	199	473	333	138	46
1949	171	423	211	93	50	174	399	304	127	40
1950	151	350	186	93	48	164	343	288	139	39
1951	149	327	196	98	48	159	314	300	131	46
1952	135	275	196	91	50	146	272	242	135	54
1953	122	233	163	85	59	133	224	240	129	51
1954	109	192	149	93	48	133	199	245	140	56
1955	96	145	154	85	48	109	144	203	126	48
1956	87	121	131	83	49	98	113	188	118	49
1957	76	91	119	74	49	93	103	162	121	46
1958	70	75	106	82	44	83	77	142	111	50
1959	58	53	86	71	40	67	55	114	88	46
1960	56	47	67	82	36	69	48	113	103	43
1961	54	41	73	77	38	64	40	93	101	43

* See footnote to Table LXXVIII.

Table LXXXVI. Mass miniature radiography: Number of examinations made by ma
(The total numbers of examinations have be

Category of person examined	Males											
	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	All ages
Out-patients and in-patients of hospitals	90	60	490	630	1,470	1,450	2,070	890	700	930	—	
H.M. Forces intakes ..	—	10	560	250	130	90	90	—	—	—	—	1,
School children (Mantoux test)	2,760	2,030	760	120	—	—	—	—	—	—	—	5,
School children (School groups)	1,790	3,490	21,370	330	—	—	—	—	—	—	—	26,
Contacts (Mantoux test) ..	580	220	380	90	130	710	340	50	10	20	10	2,
Other contacts	720	340	2,780	1,280	3,020	2,640	2,090	690	480	450	10	14,
Persons covered by special surveys	160	170	2,360	1,270	3,250	3,940	2,760	1,030	730	1,220	—	16,
Persons in prisons, borstals, etc.	210	100	4,030	4,700	4,390	2,570	1,810	540	590	1,730	10	20,
Persons in factories/offices (General surveys)	—	700	115,720	126,400	251,690	264,500	246,140	88,470	55,060	15,350	220	1,164,
General public volunteers ..	2,530	2,400	36,610	37,610	88,740	87,170	82,620	31,620	23,410	32,690	80	425,
Ante-natal cases												
Psychiatric hospitals ..	230	90	1,630	1,960	4,500	6,320	7,690	3,390	2,860	4,850	340	33,
Total	9,070	9,610	186,690	174,640	357,320	369,390	345,610	126,680	83,840	57,240	670	1,720,
Persons referred by general practitioners	2,370	860	9,050	9,960	20,940	20,780	21,900	11,030	9,570	9,310	50	115,
Total (all groups)	11,440	10,470	195,740	184,600	378,260	390,170	367,510	137,710	93,410	66,550	720	1,836,

ography units, by sex, age, and category of person examined, 1961, England and Wales
 ived from a 10 per cent sample of record cards)

er	Females											Persons	Category of person examined
	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	All ages	All ages	
50	70	700	770	1,520	1,730	2,100	890	950	1,200	—	9,980	18,760	Out-patients and in-patients of hospitals
	—	—	—	—	10	10	—	—	—	—	20	1,150	H.M. Forces intakes
60	2,140	910	50	—	—	—	—	—	—	—	5,660	11,330	School children (Mantoux test)
00	2,950	17,430	230	—	—	—	—	—	—	—	22,810	49,790	School children (School groups)
20	190	240	70	80	660	330	40	20	60	10	2,120	4,660	Contacts (Mantoux test)
70	570	3,020	1,450	2,010	2,260	1,860	550	350	510	40	13,390	27,890	Other contacts
40	270	2,410	1,510	4,500	4,500	3,130	1,040	990	1,280	—	19,870	36,760	Persons covered by special surveys
40	40	280	130	250	500	370	200	320	1,380	—	3,510	24,190	Persons in prisons, borstals, etc.
	230	152,150	114,940	101,160	105,560	91,360	27,610	9,300	3,540	140	605,990	1,770,240	Persons in factories/offices (General surveys)
70	2,170	48,570	48,200	106,940	111,450	91,990	34,250	26,970	30,510	90	503,510	928,990	General public volunteers
	—	2,420	6,970	9,390	2,110	30	—	—	—	30	20,950	20,950	Ante-natal cases
60	40	1,150	1,650	3,250	4,650	6,600	3,110	3,370	8,040	30	32,050	65,910	Psychiatric hospitals
810	8,670	229,280	175,970	229,100	233,430	197,780	67,690	42,270	46,520	340	1,239,860	2,960,620	Total
810	740	12,480	12,920	20,560	18,630	16,420	6,520	5,810	6,420	30	102,840	218,660	Persons referred by general practitioners
120	9,410	241,760	188,890	249,660	252,060	214,200	74,210	48,080	52,940	370	1,342,700	3,179,280	Total (all groups)

Table LXXXVII. Mass miniature radiography: (a) Numbers of cases of respiratory tuberculosis per 1,000 examinations, by sex, age, and category

Category of person examined	Males											
	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	Age
Out-patients and in-patients of hospitals	(a) — (b) 0.0	1 16.7	— 0.0	— 0.0	4 2.7	2 1.4	1 0.5	3 3.4	2 2.9	3 3.2	— —	—
H.M. Forces intakes	(a) — (b) —	— 0.0	— 0.0	2 8.0	— 0.0	— 0.0	— 0.0	— —	— —	— —	— —	—
School children (Mantoux test)	(a) 11 (b) 4.0	3 1.5	2 2.6	1 8.3	— —	— —	— —	— —	— —	— —	— —	—
School children (School groups)	(a) 1 (b) 0.6	3 0.9	3 0.1	— 0.0	— —	— —	— —	— —	— —	— —	— —	—
Contacts (Mantoux test)	(a) 1 (b) 1.7	1 4.5	3 7.9	— 0.0	— 0.0	3 4.2	1 2.9	1 20.0	— 0.0	1 50.0	— 0.0	—
Other contacts	(a) 1 (b) 1.4	— 0.0	6 2.2	5 3.9	5 1.7	13 4.9	8 3.8	4 5.8	6 12.5	1 2.2	— 0.0	—
Persons covered by special surveys	(a) — (b) 0.0	— 0.0	— 0.0	2 1.6	2 0.6	2 0.5	6 2.2	— 0.0	1 1.4	1 0.8	— —	—
Persons in prisons, borstals, etc.	(a) 1 (b) 4.8	— 0.0	2 0.5	5 1.1	10 2.3	8 3.1	24 13.3	8 14.8	7 11.9	15 8.7	1 100.0	—
Persons in factories/offices (General surveys)	(a) — (b) —	— 0.0	68 0.6	117 0.9	258 1.0	236 0.9	237 1.0	99 1.1	74 1.3	33 2.1	— 0.0	—
General public volunteers	(a) 1 (b) 0.4	1 0.4	32 0.9	48 1.3	108 1.2	104 1.2	133 1.6	53 1.7	50 2.1	75 2.3	— 0.0	—
Ante-natal cases	(a) — (b) —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	—
Psychiatric hospitals	(a) — (b) 0.0	1 11.1	1 0.6	6 3.1	16 3.6	9 1.4	17 2.2	10 2.9	11 3.8	12 2.5	4 11.8	—
Total	(a) 16 (b) 1.8	10 1.0	117 0.6	186 1.1	403 1.1	377 1.0	427 1.2	178 1.4	151 1.8	141 2.5	5 7.5	2.0
Persons referred by general practitioners	(a) 7 (b) 3.0	3 3.5	39 4.3	86 8.6	185 8.8	189 9.1	242 11.1	115 10.4	106 11.1	115 12.4	— 0.0	1.9
Total (all groups)	(a) 23 (b) 2.0	13 1.2	156 0.8	272 1.5	588 1.6	566 1.5	669 1.8	293 2.1	257 2.8	256 3.8	5 6.9	3.0

quiring treatment or close clinic supervision observed by mass radiography units, (b) rates
person examined, 1961, England and Wales

der 4	Females											Persons	Category of person examined
	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	All ages	All ages	
0	0.0	1.4	0.0	0.0	1.2	1.0	0.0	1.1	0.0	—	0.6	22 1.2	(a) } Out-patients and in- (b) } patients of hospitals
—	—	—	—	—	0.0	0.0	—	—	—	—	0.0	1.7	(a) } (b) } H.M. Forces intakes
2	0.5	1.1	0.0	—	—	—	—	—	—	—	4 0.7	21 1.9	(a) } School children (b) } (Mantoux test)
3	1.4	0.5	0.0	—	—	—	—	—	—	—	15 0.7	22 0.4	(a) } School children (b) } (School groups)
1	5.3	0.0	0.0	12.5	6.1	0.0	0.0	0.0	0.0	0.0	7 3.3	18 3.9	(a) } Contacts (Mantoux (b) } test)
3	1.8	2.3	4.1	1.0	1.3	0.0	0.0	2.9	3.9	0.0	25 1.9	74 2.7	(a) } (b) } Other contacts
1	0.0	0.4	0.7	0.7	0.4	1.3	0.0	1.0	0.0	—	13 0.7	27 0.7	(a) } Persons covered by (b) } special surveys
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	—	2 0.6	83 3.4	(a) } Persons in prisons, (b) } borstals, etc.
—	4.3	0.6	103 0.9	87 0.9	71 0.7	55 0.6	13 0.5	5 0.5	2 0.6	0.0	423 0.7	1,545 0.9	(a) } Persons in factories/ (b) } offices (General surveys)
1	0.0	41 0.8	47 1.0	107 1.0	91 0.8	40 0.4	19 0.6	16 0.6	19 0.6	0.0	381 0.8	986 1.1	(a) } General public (b) } volunteers
—	—	2 0.8	3 0.4	20 2.1	1 0.5	0.0	—	—	—	0.0	26 1.2	26 1.2	(a) } (b) } Ante-natal cases
2	0.0	2 1.7	4 2.4	3 0.9	5 1.1	5 0.8	2 0.6	3 0.9	2 0.2	0.0	28 0.9	115 1.7	(a) } (b) } Psychiatric hospitals
13	8 0.9	149 0.6	164 0.9	223 1.0	179 0.8	106 0.5	34 0.5	27 0.6	27 0.6	0.0	930 0.8	2,941 1.0	(a) } (b) } Total
1	3 4.1	33 2.6	64 5.0	96 4.7	119 6.4	69 4.2	20 3.1	19 3.3	21 3.3	0.0	445 4.3	1,532 7.0	(a) } Persons referred by (b) } general practitioners
14	11 1.2	182 0.8	228 1.2	319 1.3	298 1.2	175 0.8	54 0.7	46 1.0	48 0.9	0.0	1,375 1.0	4,473 1.4	(a) } (b) } Total (all groups)

Table LXXXVIII. Mass miniature radiography: (a) Numbers, (b) rates per 1,000 examinations, of non-tuberculous conditions diagnosed following examination, by sex and age, 1961, England and Wales

Category of person	Males											Females											Per- sons		
	Under 14	14	15-	20-	25-	35-	45-	55-	60-	65 and over	Not stated	All ages	Under 14	14-	15-	20-	25-	35-	45-	55-	60-	65 and over		Not stated	All ages
Malignant neoplasms																									
All groups, <i>excluding</i> persons {(a) referred by general practitioners {(b)	—	—	2	4	9	47	189	221	209	276	1	958	—	—	2	—	2	17	41	29	26	42	—	159	1,117
	—	—	0.0	0.0	0.0	0.1	0.5	1.7	2.5	4.8	1.5	0.6	—	—	0.0	0.0	0.0	0.1	0.2	0.4	0.6	0.9	—	0.1	0.4
Persons referred by general prac- {(a) titioners {(b)	—	—	1	3	10	46	291	285	276	425	—	1,337	—	—	—	—	5	22	51	39	36	70	—	223	1,560
	—	—	0.1	0.3	0.5	2.2	13.3	12.5	12.8	18.4	—	11.5	—	—	—	—	0.2	1.2	3.1	6.0	6.2	10.9	—	2.2	7.1
Total (all groups) {(a) {(b)	—	—	3	7	19	93	480	506	485	701	1	2,295	—	—	2	—	7	39	92	68	62	112	—	382	2,677
	—	—	0.0	0.0	0.1	0.2	1.3	3.7	5.2	10.5	1.4	1.2	—	—	0.0	0.0	0.2	0.4	0.9	1.3	2.1	—	—	0.3	0.8
Non-malignant neoplasms																									
All groups, <i>excluding</i> persons {(a) referred by general practitioners {(b)	—	—	9	7	15	56	74	49	42	27	—	279	—	—	7	51	11	37	50	43	28	58	—	239	518
	—	—	0.0	0.0	0.0	0.2	0.2	0.4	0.5	0.5	—	0.2	—	—	0.0	0.0	0.0	0.2	0.3	0.6	0.7	1.2	—	0.2	0.2
Persons referred by general prac- {(a) titioners {(b)	—	—	—	1	1	4	11	6	8	16	—	47	—	—	—	—	3	4	8	8	8	15	—	46	93
	—	—	—	0.1	0.0	0.2	0.5	0.5	0.8	1.7	—	0.4	—	—	—	—	0.1	0.2	0.5	1.2	1.4	2.3	—	0.4	0.4
Total (all groups) {(a) {(b)	—	—	9	8	16	60	85	55	50	43	—	326	—	—	7	5	14	41	58	51	36	73	—	285	611
	—	—	0.0	0.0	0.0	0.2	0.2	0.4	0.5	0.6	—	0.2	—	—	0.0	0.0	0.1	0.2	0.3	0.7	0.7	1.4	—	0.2	0.2
Lymphadenopathies, excluding sarcoids																									
All groups, <i>excluding</i> persons {(a) referred by general practitioners {(b)	1	—	1	1	5	2	4	—	2	1	—	17	2	—	4	3	4	2	4	1	—	1	—	21	38
	0.1	—	0.0	0.0	0.0	0.0	0.0	—	0.0	0.0	—	0.0	0.2	—	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	—	0.0	0.0
Persons referred by general prac- {(a) titioners {(b)	3	1	—	—	2	1	—	1	1	2	—	12	1	—	1	3	5	4	1	3	1	—	—	20	32
	1.3	1.2	0.1	—	0.1	0.0	—	0.1	0.1	0.2	—	0.1	0.4	—	0.1	0.2	0.2	0.1	0.5	0.2	0.2	—	—	0.2	0.1
Total (all groups) {(a) {(b)	4	1	2	1	7	3	4	1	3	3	—	29	3	—	5	6	9	6	5	4	1	2	—	41	70
	0.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	—	0.0	0.3	—	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	—	0.0	0.0
Sarcoids, including enlarged hilar glands																									
All groups, <i>excluding</i> persons {(a) referred by general practitioners {(b)	1	—	20	41	135	40	24	7	3	4	—	275	—	—	2	13	52	68	52	50	11	9	—	261	536
	0.1	—	0.1	0.2	0.4	0.1	0.1	0.1	0.0	0.1	—	0.2	—	—	0.2	0.1	0.3	0.3	0.2	0.3	0.2	0.1	—	0.2	0.2
Persons referred by general prac- {(a) titioners {(b)	—	—	3	9	30	8	8	4	1	5	—	68	—	—	5	21	33	17	15	2	2	5	—	100	168
	—	—	0.3	0.9	1.4	0.4	0.4	0.4	0.1	0.5	—	0.6	—	—	0.4	1.6	0.9	0.9	0.3	0.3	0.3	0.8	—	1.0	0.8
Total (all groups) {(a) {(b)	1	—	23	50	165	48	32	11	4	9	—	343	—	—	2	18	73	101	69	65	13	11	—	361	704
	0.1	—	0.1	0.3	0.4	0.1	0.1	0.1	0.0	0.1	—	0.2	—	—	0.2	0.1	0.4	0.4	0.3	0.2	0.2	0.2	—	0.3	0.2

Congenital cardiac abnormalities and abnormalities of the vascular system

All groups, excluding persons referred by general practitioners	4	9	33	24	46	33	30	11	9	4	—	203	5	1	52	23	30	32	25	11	6	3	—	188	391
Persons referred by general practitioners	0.4	0.9	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	—	0.1	0.6	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	—	0.2	0.1
Persons referred by general practitioners	3	—	—	1	1	10	7	—	5	3	1	—	31	4	2	—	3	6	6	6	1	1	—	30	61
Persons referred by general practitioners	1.3	—	0.1	0.1	0.5	0.3	—	—	0.5	0.3	0.1	—	0.3	1.7	2.7	—	0.2	0.3	0.3	0.4	0.2	0.2	—	0.3	0.3
Total (all groups)	7	9	34	25	56	40	30	16	12	5	—	234	9	3	52	26	36	38	31	12	7	4	—	218	452
	0.6	0.9	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	—	0.1	0.8	0.3	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	—	0.2	0.1

Acquired cardiac abnormalities and abnormalities of the vascular system

All groups, excluding persons referred by general practitioners	1	4	58	83	129	269	607	469	450	754	1	2,825	12	2	88	100	173	294	738	566	518	832	1	3,324	6,149
Persons referred by general practitioners	0.1	0.4	0.3	0.5	0.4	0.7	1.8	3.7	5.4	13.2	1.5	1.6	1.4	0.2	0.4	0.6	0.8	1.3	3.7	8.4	12.3	17.9	2.9	2.7	2.1
Persons referred by general practitioners	2	—	6	17	38	74	189	176	219	426	1	1,148	4	5	12	18	43	83	188	155	161	445	—	1,114	2,262
Persons referred by general practitioners	0.8	—	0.7	1.7	1.8	3.6	8.6	16.0	22.9	45.8	20.0	9.9	1.7	6.8	1.0	1.4	2.1	4.5	11.4	23.8	27.7	69.3	—	10.8	10.3
Total (all groups)	3	4	64	100	167	343	796	645	669	1180	2	3,973	16	7	100	118	216	377	926	721	679	1,277	1	4,438	8,411
	0.3	0.4	0.3	0.5	0.4	0.9	2.2	4.7	7.2	17.7	2.8	2.2	1.4	0.7	0.4	0.6	0.9	1.5	4.3	9.7	14.1	24.1	2.7	3.3	2.6

Pneumoconiosis without progressive massive fibrosis

All groups, excluding persons referred by general practitioners	—	—	—	—	28	259	588	365	245	209	2	1,696	—	—	—	—	3	6	12	8	4	1	—	35	1,731
Persons referred by general practitioners	—	—	—	—	0.1	0.7	1.7	2.9	2.9	3.7	3.0	1.0	—	—	—	—	0.0	0.0	0.1	0.1	0.1	0.0	—	0.0	0.6
Persons referred by general practitioners	—	—	—	—	11	77	155	125	97	60	—	525	—	—	—	—	3	4	11	6	7	3	—	34	559
Persons referred by general practitioners	—	—	—	—	0.5	3.7	7.1	11.3	10.1	6.4	—	4.5	—	—	—	—	0.1	0.2	0.7	0.9	1.2	0.5	—	0.3	2.6
Total (all groups)	—	—	—	—	39	336	743	490	342	269	2	2,221	—	—	—	—	1	6	10	23	14	11	4	69	2,290
	—	—	—	—	0.1	0.9	2.0	3.6	3.7	4.0	2.8	1.2	—	—	—	—	0.0	0.0	0.0	0.1	0.2	0.2	—	0.1	0.7

Pneumoconiosis with progressive massive fibrosis

All groups, excluding persons referred by general practitioners	—	—	—	—	17	27	34	29	40	—	147	—	—	—	—	—	2	—	3	—	—	2	—	7	154
Persons referred by general practitioners	—	—	—	—	0.0	0.1	0.3	0.3	0.7	—	0.1	—	—	—	—	—	0.0	0.0	0.0	—	—	0.0	—	0.0	0.1
Persons referred by general practitioners	—	—	—	—	2	11	10	10	11	—	44	—	—	—	—	—	1	—	2	—	—	3	—	6	50
Persons referred by general practitioners	—	—	—	—	0.1	0.5	0.9	1.0	1.2	—	0.4	—	—	—	—	—	0.0	0.1	—	—	—	0.5	—	0.1	0.2
Total (all groups)	—	—	—	—	19	38	44	39	51	—	191	—	—	—	—	—	3	—	5	—	—	5	—	13	204
	—	—	—	—	0.0	0.1	0.3	0.4	0.8	—	0.1	—	—	—	—	—	0.0	—	0.0	—	—	0.1	—	0.0	0.1

Table LXXXIX. Deaths from cancer by sex and age according to histological type and death rates per million living, 1961, England and Wales

	All ages	0-	15-	35-	45-	55-	65 and over
	Number of deaths						
All malignant neo- plasms (140-205) { M	53,441	460	879	1,632	6,355	15,086	29,029
F	46,474	347	703	2,117	6,258	10,344	26,705
Carcinoma .. { M	46,734	22	320	1,116	5,289	13,412	26,575
F	40,783	34	341	1,744	5,435	9,058	24,171
Glioma .. { M	935	77	87	101	254	301	115
F	679	47	63	73	159	233	104
Sarcoma .. { M	963	95	113	90	162	211	292
F	1,070	87	83	90	162	193	455
Reticuloses .. { M	2,969	257	337	270	437	676	992
F	2,526	168	196	145	329	554	1,134
Undefined .. { M	1,840	9	22	55	213	486	1,055
F	1,416	11	20	65	173	306	841
	Death rates per million persons living						
All malignant neo- plasms (140-205) ..	2,164	76	133	596	1,957	4,686	10,095
Carcinoma ..	1,896	5	56	455	1,664	4,140	9,191
Glioma	35	12	13	28	64	98	40
Sarcoma	44	17	16	29	50	74	135
Reticuloses ..	119	40	45	66	119	227	385
Undefined	71	2	4	19	60	146	343

Table XC. Cancer (ICD Nos. 140-205): Sex and age specific death rates per million living from cancer at various sites and the percentage of mortality at each site to "all sites", 1961, England and Wales

Males

ICD No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites
140	Lip	30	1	0	1	1	6	17	47	118	392	750	1.3
141	Tongue												
142	Salivary gland												
143	Floor of mouth												
144	Other parts of mouth and mouth unspecified												
145	Oral mesopharynx												
146	Nasopharynx	18	—	1	1	2	3	13	41	86	146	250	0.7
147	Hypopharynx												
148	Pharynx unspecified												
150	Oesophagus	61	—	—	—	1	7	38	132	305	618	804	2.5
151	Stomach	348	—	—	1	12	65	276	844	1,802	2,839	2,957	14.6
152	Small intestine, including duodenum	171	1	0	2	7	34	117	318	853	1,789	2,424	7.1
153	Large intestine, except rectum												
154	Rectum	131	—	—	2	5	21	72	265	654	1,365	2,022	5.5
155	Biliary passages and liver (stated to be primary site)	27	1	0	—	3	5	23	62	149	208	152	1.1
157	Pancreas	93	—	0	1	2	17	76	225	468	744	1,000	3.9
161	Larynx	29	—	—	—	0	3	21	64	153	278	326	1.2
162	Bronchus and trachea, and of lung specified as primary												
163	Lung, unspecified as to whether primary or secondary	871	—	1	4	24	163	891	2,880	4,491	3,690	1,891	36.4
170	Breast	4	—	—	—	—	1	4	8	20	25	33	0.2
177	Prostate	164	2	—	—	—	2	14	140	869	2,772	3,880	6.8
178	Testis	8	—	1	10	20	8	8	7	10	20	11	0.3
179	Other and unspecified male genital organs	7	—	—	—	1	2	6	12	30	67	130	0.3
180	Kidney	34	11	1	1	5	12	35	95	126	214	141	1.4
181	Bladder and other urinary organs	96	1	—	0	2	12	53	196	532	940	1,326	4.0

Table XC—continued

Males

ICD No.	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	Per cent of all sites
190	Skin (malignant melanoma)	19	1	1	3	4	10	15	28	75	164	565	0.8
191	Skin (malignant neoplasm)	51	28	18	14	23	39	93	140	91	18	—	2.1
193	Malignant neoplasm of brain and other parts of nervous system	4	—	—	0	0	1	5	10	17	45	—	0.2
194	Thyroid gland	2	4	1	1	0	0	2	5	6	7	—	0.1
195	Other endocrine glands	22	3	5	12	8	8	20	40	85	116	228	0.9
196	Bone (including jaw bone)	10	—	0	1	3	4	13	23	40	54	43	0.4
197	Connective tissue	26	4	5	7	14	17	32	60	96	72	76	1.1
158	Peritoneum	24	—	3	12	29	31	32	40	55	50	54	1.0
164	Mediastinum	4	3	—	—	0	3	5	12	15	12	33	0.2
198	Secondary and unspecified malignant lymph nodes	15	—	0	—	1	5	17	45	71	65	43	0.6
200	Lymphosarcoma and reticulosarcoma	63	56	30	27	23	31	51	111	210	305	272	2.6
201	Hodgkin's disease	1	—	—	—	—	—	2	0	3	3	11	0.0
202	Other forms of lymphoma (reticulosis)	60	3	—	3	3	15	59	146	282	469	478	2.5
203	Multiple myeloma (plasmocytoma)	2,392	117	67	100	195	524	2,008	5,996	11,711	17,487	19,902	100
204	Leukaemia and aleukaemia	66	33	21	16	31	49	114	188	126	35	11	
205	Mycosis fungoides												
Others in 140–205	Remaining sites												
140–205	Total	2,392	117	67	100	195	524	2,008	5,996	11,711	17,487	19,902	100
193	Malignant neoplasm of brain and other parts of nervous system	66	33	21	16	31	49	114	188	126	35	11	
223	Benign neoplasm of brain and other parts of nervous system												
237	Neoplasm of unspecified nature of brain and other parts of nervous system												

Table XCI. Cancer (ICD Nos. 140-205): Sex and age specific death rates per million living from cancer at various sites and the percentage of mortality at each site to "all sites", 1961, England and Wales

Females

ICD No.	Site or organ	All ages	0-	5-	15-	25-	35-	45-	55-	65-	75-	85 and over	Per cent of all sites
140	Lip ..	13	—	—	1	1	3	9	19	46	71	195	0.7
141	Tongue ..		—	—	1	1	1	1	1	1	1	1	0.7
142	Salivary gland ..		—	—	—	—	—	—	—	—	—	—	2.3
143	Floor of mouth ..		—	—	—	—	—	—	—	—	—	—	12.9
144	Other parts of mouth and mouth unspecified ..	14	—	1	—	2	5	16	31	45	60	49	0.7
145	Oral mesopharynx ..	44	—	—	—	2	5	26	67	155	304	454	2.3
146	Nasopharynx ..		—	—	—	2	5	26	67	155	304	454	2.3
147	Hypopharynx ..		—	—	1	11	38	115	339	933	1,851	2,454	12.9
148	Pharynx unspecified ..		—	—	1	11	38	115	339	933	1,851	2,454	12.9
150	Oesophagus ..	252	—	—	—	—	—	—	—	—	—	—	12.0
151	Stomach ..	233	1	—	1	9	42	136	337	774	1,633	2,702	12.0
152	Small intestine, including duodenum ..	102	—	—	1	3	21	70	148	345	675	1,112	5.2
153	Large intestine, except rectum ..		—	—	1	3	21	70	148	345	675	1,112	5.2
154	Rectum ..		—	—	1	3	21	70	148	345	675	1,112	5.2
155	Biliary passages and liver (stated to be primary site) ..		3	—	0	1	7	20	54	147	225	278	1.9
157	Pancreas ..	80	—	—	0	1	8	45	131	305	500	776	4.1
161	Larynx ..	7	—	—	—	—	2	8	15	19	34	59	0.4
162	Bronchus and trachea, and of lung specified as primary ..	141	1	—	1	8	51	159	323	480	537	502	7.2
163	Lung, unspecified as to whether primary or secondary ..		—	—	0	33	187	585	805	1,043	1,514	2,376	20.0
170	Breast ..	390	—	—	0	16	92	171	213	255	335	385	5.4
171	Cervix uteri ..	105	1	—	0	0	8	45	122	197	219	312	2.7
172	Corpus uteri ..	52	—	—	—	0	8	45	122	197	219	312	2.7
173	Other parts of uterus, including chorionepithelioma ..	10	—	—	1	1	5	8	23	26	45	59	0.5
174	Uterus, unspecified ..		—	—	1	1	5	8	23	26	45	59	0.5
175	Ovary, Fallopian tube and broad ligament ..		—	2	2	15	60	202	335	345	349	341	6.6
176	Other and unspecified female genital organs ..		1	—	—	1	4	12	23	75	141	273	1.1

Table XCI—continued

Females

ICD No.	Site or organ	All ages	0–	5–	15–	25–	35–	45–	55–	65–	75–	85 and over	Per cent of all sites
180	Kidney	22	8	3	1	1	8	14	48	65	103	122	1.1
181	Bladder and other urinary organs	39	1	0	—	0	5	16	50	150	267	512	2.0
190	Skin (malignant melanoma)	19	1	—	1	6	12	15	24	54	95	268	1.0
191	Skin (malignant neoplasm)												
193	Malignant neoplasm of brain and other parts of nervous system	36	18	15	13	16	29	56	91	53	24	15	1.8
194	Thyroid gland	12	—	—	0	—	2	8	17	50	63	107	0.6
195	Other endocrine glands	2	2	1	—	1	2	2	3	5	5	—	0.1
196	Bone (including jaw bone)	16	2	8	8	5	4	13	19	41	79	107	0.8
197	Connective tissue												
158	Peritoneum	10	1	1	0	1	3	9	20	30	38	83	0.5
164	Mediastinum												
198	Secondary and unspecified malignant lymph nodes												
200	Lymphosarcoma and reticulosarcoma	22	3	3	3	7	8	22	40	68	82	117	1.1
201	Hodgkin's disease	13	—	2	10	12	9	14	21	23	36	54	0.7
202	Other forms of lymphoma (reticulosis)	4	3	0	1	0	2	4	10	7	13	5	0.2
203	Multiple myeloma (plasmocytoma)	15	—	—	—	1	2	13	41	62	60	29	0.8
204	Leukaemia and aleukaemia	52	34	24	16	17	26	46	78	134	194	215	2.7
205	Mycosis fungoides	0	—	—	—	—	—	1	0	2	4	—	0.0
Others in 140–205	Remaining sites	63	2	2	2	7	17	50	107	212	357	468	3.2
140–205	Total	1,951	80	61	63	179	667	1,908	3,553	6,144	9,912	14,429	100
193	Malignant neoplasm of brain and other parts of nervous system												
223	Benign neoplasm of brain and other parts of nervous system	50	27	19	17	23	37	78	122	89	37	24	
237	Neoplasm of unspecified nature of brain and other parts of nervous system												

Table XCII. Cancer: Standardised Mortality Ratios by sex for selected sites, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1961, England and Wales

	All sites (140-205)		Buccal cavity and pharynx (140-148)		Oesophagus (150)		Stomach (151)		Intestine and rectum (152-154)		Larynx (161)		Trachea, bronchus and lungs (162, 163)		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
ENGLAND AND WALES															
Regions:	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Northern ..	96	106	115	105	112	119	113	139	108	113	69	98	92	93	
East and West Ridings ..	102	102	104	116	89	66	102	108	111	106	98	97	101	92	
North Western ..	107	103	113	108	121	113	120	118	107	110	104	166	110	96	
North Midland ..	90	93	72	95	87	87	92	91	93	97	117	99	85	76	
Midland ..	99	97	110	97	87	91	103	104	100	103	108	78	101	79	
Eastern ..	85	93	90	70	91	90	75	79	82	88	102	59	81	102	
London and South Eastern ..	110	103	95	95	104	88	93	87	100	95	104	84	119	132	
Southern ..	95	96	81	80	86	99	81	79	96	90	102	86	97	107	
South Western ..	91	95	114	97	96	105	95	90	97	95	97	104	79	85	
Wales (including Monmouthshire) ..	97	104	105	158	112	200	130	137	102	109	78	123	84	60	
Conurbations:	116	113	147	103	120	88	125	142	142	123	80	183	121	131	
Tyneside ..	104	103	99	104	79	79	107	106	107	114	101	140	100	84	
West Yorkshire ..	113	103	121	88	112	97	132	115	109	116	74	138	116	93	
South East Lancashire ..	122	109	122	114	135	135	124	128	91	111	168	224	145	135	
Merseyside ..	107	99	107	66	73	82	117	112	101	109	134	81	117	85	
West Midlands ..	115	105	97	103	99	90	98	94	103	95	108	80	127	139	
Greater London ..	113	104	106	97	99	92	109	105	105	104	109	110	122	119	
Urban and rural aggregates:	108	103	102	125	106	95	108	106	105	101	147	91	109	111	
Conurbations ..	99	98	122	92	98	95	94	88	101	94	101	83	101	95	
Urban areas with populations of 100,000 and over ..	92	98	101	88	96	111	96	103	97	101	83	95	88	81	
Urban areas with populations under 50,000 ..	84	93	81	107	102	106	87	88	92	92	78	100	71	82	
Rural districts ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Areas outside conurbations:															
Urban areas with populations of 100,000 and over ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Urban areas with populations of 50,000 and under 100,000 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Urban areas with populations under 50,000 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rural districts ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Table XCII—continued

	Breast (170)		Cervix uteri (171)	Other parts of uterus (172-174)		Prostate (177)	Bladder (181·0, ·8)		Bone (including jaw bone) (196)		Lymphosarcoma, reticulosarcoma (200)		Hodgkin's disease (201)		Leukaemia and aleukaemia (204)	
	M	F		F	M		M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES																
Regions:																
Northern	100	92	100	92	100	84	85	87	100	113	82	92	100	95	78	107
East and West Ridings	124	102	125	91	101	94	110	86	103	87	70	59	109	132	104	89
North Western	89	95	111	101	101	91	100	101	133	135	60	92	110	84	94	97
North Midland	201	101	94	92	101	101	87	73	79	56	103	81	84	86	83	88
Midland	51	102	94	89	96	96	93	83	113	141	84	76	99	73	88	94
Eastern	44	103	68	105	103	103	86	133	64	70	123	133	76	125	89	94
London and South Eastern	103	106	93	102	116	114	118	88	103	139	125	99	115	104	115	112
Southern	138	97	102	113	98	109	109	98	90	66	84	114	96	85	109	102
South Western	109	100	94	108	100	94	82	80	80	109	109	104	96	106	114	93
Wales (including Monmouthshire)	61	86	110	107	107	84	95	88	115	63	99	75	138	118	86	108
Conurbations:																
Tyneside	142	97	131	122	75	75	100	83	114	45	96	137	101	74	87	84
West Yorkshire	134	104	129	80	98	98	122	85	135	100	70	60	120	110	98	108
South East Lancashire	123	98	117	103	90	90	106	95	178	124	40	80	142	74	98	104
Merseyside	99	99	111	87	88	116	116	122	176	108	77	105	87	57	102	102
West Midlands	54	107	92	80	96	96	96	89	98	132	100	63	84	54	90	88
Greater London	66	107	93	102	113	113	121	130	82	108	155	127	100	92	114	103
Urban and rural aggregates:																
Conurbations	86	104	103	97	102	102	114	113	112	110	113	104	105	83	104	101
Areas outside conurbations:																
Urban areas with populations of 100,000 and over	89	100	121	97	102	102	116	98	121	78	94	97	108	99	108	99
Urban areas with populations of 50,000 and under 100,000	112	101	97	92	101	101	91	105	63	105	86	109	86	70	100	105
Urban areas with populations under 50,000	129	97	96	102	96	96	92	94	100	92	90	96	95	135	90	100
Rural districts	92	95	86	109	100	100	80	84	82	104	98	96	97	104	99	97

Table XCIII. Cancer: Death rates per million living, by sex and certain ages, and Standardised Mortality Ratios (All ages) by sex, for selected sites, 1952 to 1961, England and Wales

All ages	0-5	15-25	35-45	55-65	75-85 and over	S.M.R. (1950-52 = 100)	All ages	0-5	15-25	35-45	55-65	75-85 and over	S.M.R. (1950-52 = 100)	FEMALES											
														All sites (140-205)											
2,152	130	70	102	182	568	2,073	5,562	10,540	16,495	17,031	101	1952	1,848	103	56	66	170	709	1,836	3,680	6,424	10,683	13,169	99	
2,166	102	68	104	182	575	2,077	5,616	10,604	16,419	17,279	102	1953	1,833	105	55	59	202	702	1,818	3,574	6,250	10,536	13,197	98	
2,223	106	64	105	173	587	2,087	5,720	10,914	16,590	17,730	103	1954	1,861	80	52	72	197	711	1,871	3,556	6,305	10,350	13,509	98	
2,252	105	68	99	189	548	2,061	5,803	11,008	17,026	17,308	104	1955	1,873	102	50	63	202	681	1,860	3,550	6,306	10,272	13,551	98	
2,274	109	75	101	178	561	2,019	5,885	11,102	16,962	18,038	105	1956	1,891	100	61	71	201	697	1,809	3,559	6,250	10,350	13,682	97	
2,312	100	64	109	185	534	2,035	5,950	11,231	17,111	17,849	106	1957	1,890	83	47	57	178	693	1,813	3,559	6,113	10,284	13,277	96	
2,333	116	80	90	184	520	2,047	5,869	11,504	17,230	17,761	106	1958	1,929	87	52	72	191	701	1,865	3,521	6,240	10,294	13,862	97	
2,366	100	67	98	185	550	2,020	5,983	11,624	17,457	17,889	107	1959	1,929	90	63	69	199	697	1,841	3,487	6,113	10,336	14,016	97	
2,391	96	80	99	194	531	2,008	6,038	11,663	17,478	18,543	108	1960	1,943	95	59	62	191	689	1,879	3,445	6,203	10,174	13,901	97	
2,392	117	67	100	195	524	2,008	5,996	11,711	17,487	19,902	108	1961	1,951	80	61	63	179	667	1,908	3,553	6,144	9,912	14,429	96	
MALES														Kidney (180)											
30	15	3	1	2	13	36	81	134	153	77	104	1952	21	18	3	—	2	6	16	42	72	106	108	110	
31	5	3	1	1	11	40	89	133	159	77	106	1953	19	10	3	—	2	6	15	42	70	95	79	103	
32	13	3	1	2	6	40	104	144	138	41	108	1954	20	9	4	0	2	6	13	33	75	102	130	104	
33	12	3	0	4	10	43	91	141	164	74	112	1955	18	13	4	0	2	5	13	40	61	90	48	95	
33	12	4	1	3	12	36	92	137	180	725	110	1956	20	14	4	1	3	5	14	38	72	91	121	103	
33	11	2	1	2	8	41	96	141	156	81	109	1957	19	5	3	0	3	3	10	42	67	97	92	95	
35	14	2	2	2	11	40	89	161	194	748	117	1958	22	15	3	2	1	6	19	35	68	112	154	102	
32	5	1	1	3	11	39	93	131	192	44	107	1959	20	9	3	0	1	8	15	30	76	91	109	98	
32	10	2	1	4	8	37	88	146	169	64	106	1960	22	10	4	2	1	8	17	37	72	113	108	109	
34	11	1	1	5	12	35	95	126	214	741	111	1961	22	8	3	1	1	8	14	48	65	103	122	107	
Brain and other parts of nervous system (193)														Kidney (180)											
39	22	13	11	17	42	76	117	46	71	15	111	1952	23	16	12	6	8	24	40	55	31	10	14	102	
38	13	12	17	39	74	104	144	57	20	29	107	1953	20	15	13	7	17	25	45	29	31	10	14	102	
39	15	11	16	40	76	108	158	56	25	—	109	1954	27	19	13	9	18	24	40	26	30	11	11	113	
42	24	16	9	19	35	83	118	65	23	13	117	1955	27	19	13	9	18	24	40	26	30	11	11	113	
41	22	17	11	17	39	74	111	75	19	—	114	1956	28	18	10	8	15	29	47	67	42	20	—	125	
41	15	10	13	19	39	77	118	68	79	12	114	1957	29	9	10	8	11	27	50	76	44	14	11	126	
50	28	21	12	20	41	90	139	82	22	23	136	1958	34	14	10	11	14	29	55	90	56	14	—	149	
48	24	15	12	20	42	99	119	82	79	—	131	1959	35	23	12	11	18	33	55	78	58	19	16	153	
50	19	20	9	18	45	95	137	86	29	11	136	1960	33	23	15	17	14	30	56	84	50	78	15	146	
51	28	18	14	23	39	93	140	91	78	—	139	1961	36	18	15	13	16	29	56	91	53	24	15	156	

Pharynx (145-148)

26	0	5	16	50	142	270	338	102	1952	14	2	8	17	35	48	62	47	104
27	1	6	17	52	140	232	338	105	1953	12	2	8	18	38	50	51	66	104
28	1	6	15	59	141	254	338	106	1954	13	2	8	20	30	43	57	82	104
29	2	5	11	57	124	254	368	79	1955	14	2	6	20	31	46	87	95	
20	1	5	10	47	109	192	368	79	1956	14	2	6	16	31	46	47	87	
24	1	4	15	41	135	211	337	90	1957	15	3	6	15	33	54	61	71	103
25	1	5	13	49	96	240	205	83	1958	14	3	7	20	33	36	51	53	96
22	1	4	17	47	108	214	256	85	1959	13	3	7	13	28	41	46	73	96
21	1	2	15	40	96	185	149	73	1960	14	3	7	19	31	46	48	69	96
18	2	3	13	41	86	146	250	68	1961	14	2	5	16	31	45	60	49	95

Oesophagus (150)

70	0	7	39	148	370	843	862	98	1952	37	1	10	22	63	160	262	338	99
63	2	9	32	127	352	729	862	88	1953	38	2	10	26	68	143	283	404	99
61	1	8	37	123	330	757	811	88	1954	40	2	6	23	68	143	384	404	104
63	2	9	37	126	329	757	779	88	1955	41	1	10	24	68	149	314	365	106
64	1	10	37	141	329	696	775	88	1956	41	2	6	26	67	152	307	387	104
61	1	8	39	119	322	646	709	82	1957	41	0	5	27	61	152	315	375	103
60	2	6	34	123	345	599	557	81	1958	42	1	5	20	62	156	321	441	104
63	1	8	37	127	331	643	856	85	1959	41	1	5	21	64	141	302	409	99
59	2	6	36	113	299	653	777	79	1960	43	1	7	28	60	144	306	453	102
61	1	7	38	132	305	618	804	82	1961	44	2	5	26	67	155	304	454	106

Stomach (151)

382	14	80	378	978	2,009	3,079	2,523	99	1952	278	10	52	165	443	1,158	2,181	2,486	97
379	17	88	343	978	2,084	2,977	2,528	98	1953	271	14	51	137	412	1,069	2,211	2,366	93
373	12	88	318	978	1,984	2,970	2,888	95	1954	271	13	43	161	433	1,064	2,115	2,366	92
360	10	76	331	905	1,984	2,169	2,888	95	1955	268	11	42	146	395	1,058	2,080	2,605	90
369	16	64	311	909	1,907	2,938	2,712	91	1956	268	11	45	139	394	1,008	2,126	2,503	89
365	10	69	303	885	1,893	3,095	2,930	93	1957	258	11	42	119	392	977	1,967	2,380	85
362	11	60	303	895	1,926	2,954	2,830	92	1958	264	12	41	128	362	1,001	2,032	2,495	84
356	11	60	294	863	1,925	2,986	2,744	91	1959	262	10	37	126	355	951	2,019	2,668	83
356	11	63	283	873	1,845	2,898	2,543	88	1960	258	11	37	125	347	949	1,890	2,729	81
348	12	65	276	844	1,802	2,839	2,957	87	1961	252	11	38	115	339	933	1,851	2,454	79

Large intestine, except rectum (153)

197	13	44	117	353	1,065	2,281	2,692	97	1952	248	11	44	149	396	898	2,073	3,142	98
196	13	48	127	352	1,025	2,267	2,952	97	1953	248	11	48	143	391	888	2,139	3,140	95
190	7	43	111	334	975	2,187	2,784	93	1954	248	12	29	143	383	832	1,875	2,726	92
183	12	38	112	346	932	2,066	2,487	89	1955	240	13	26	143	352	800	1,804	2,704	91
177	11	32	107	333	918	1,969	2,413	86	1956	236	11	47	139	366	797	1,829	2,763	89
176	12	38	106	316	869	1,998	2,477	84	1957	233	7	40	134	351	786	1,773	2,777	86
170	8	37	106	306	862	1,871	2,477	81	1958	232	10	40	137	335	767	1,745	2,899	85
165	11	32	103	309	814	1,829	2,122	79	1959	236	11	41	142	334	777	1,745	2,751	85
164	11	33	108	316	781	1,758	2,181	78	1960	230	7	40	143	334	760	1,613	2,695	82
165	7	32	109	299	825	1,762	2,413	79	1961	229	9	40	134	326	760	1,612	2,693	81

Table XCIII—continued

All ages	25-	35-	45-	55-	65-	75-	85 and over	S.M.R. (1950-52 = 100)	FEMALES									
									All ages	25-	35-	45-	55-	65-	75-	85 and over		
Rectum (154)																		
162	6	26	97	326	889	1,796	2,031	95	1952	4	27	74	193	390	781	912	96	
157	5	24	88	306	852	1,708	1,838	90	1953	9	26	84	197	378	758	875	96	
157	6	27	95	288	854	1,737	2,108	91	1954	7	28	74	184	381	776	1,099	96	
149	7	22	95	311	760	1,664	1,615	86	1955	7	27	69	183	378	708	1,078	91	
147	4	21	77	281	794	1,679	1,938	84	1956	5	20	74	163	382	670	1,081	90	
144	7	20	83	274	773	1,575	1,663	82	1957	4	22	65	152	357	666	1,043	84	
144	4	23	91	291	735	1,565	1,568	79	1958	4	21	69	171	367	731	1,197	91	
140	5	23	83	272	729	1,492	1,789	82	1959	6	23	68	166	368	806	1,145	93	
137	5	21	86	253	718	1,448	1,872	77	1960	3	17	68	147	375	696	1,030	86	
131	5	21	72	265	654	1,365	2,022	74	1961	3	21	70	148	345	675	1,112	84	
Pancreas (157)																		
82	3	17	67	215	441	674	646	105	1952	1	9	40	126	285	506	642	105	
83	3	20	73	197	438	649	794	104	1953	2	11	41	116	266	486	474	99	
83	3	20	71	204	448	667	784	105	1954	1	10	40	111	275	462	689	100	
86	2	19	69	216	441	718	795	108	1955	2	9	45	121	294	465	623	105	
86	2	16	74	223	442	712	538	107	1956	2	10	32	126	276	442	549	98	
87	3	15	76	218	471	656	709	108	1957	1	15	43	129	275	510	603	107	
91	3	16	75	214	472	762	886	113	1958	1	9	40	122	305	476	718	107	
95	0	17	71	238	500	762	933	117	1959	2	10	42	141	289	534	658	111	
94	1	18	70	229	485	770	957	115	1960	2	12	42	115	308	540	739	111	
93	2	17	76	225	468	744	1,000	114	1961	1	8	45	131	305	500	776	111	
Trachea, bronchus and lung (162, 163)																		
568	25	179	843	2,142	2,514	1,623	1,046	107	1952	7	40	107	253	344	438	324	105	
607	27	173	881	2,245	2,768	1,913	868	114	1953	11	40	107	235	361	435	263	104	
657	25	181	934	2,410	3,040	2,018	838	122	1954	11	41	122	235	379	388	373	107	
693	24	175	895	2,539	3,310	2,280	1,000	128	1955	10	39	120	261	390	416	275	111	
726	25	172	918	2,625	3,473	2,473	1,288	133	1956	10	40	122	267	393	445	428	115	
759	20	169	915	2,724	3,658	2,655	1,384	138	1957	9	40	133	280	390	476	364	118	
784	23	166	916	2,684	3,923	2,969	1,182	142	1958	11	48	135	278	401	468	404	121	
831	24	182	912	2,849	4,171	3,211	1,378	149	1959	10	46	147	287	411	467	368	124	
856	28	158	898	2,879	4,316	3,564	1,862	153	1960	8	52	146	300	456	517	399	132	
871	24	163	891	2,880	4,491	3,690	1,891	156	1961	8	51	159	323	480	537	502	140	

	3	4	1	3	6	14	20	62	94	1952	363	30	217	513	791	1,114	1,579	2,088	101
149	4	4	3	4	14	15	16	44	128	1953	356	36	218	494	766	1,073	1,510	2,289	99
150	4	4	3	4	8	15	30	27	125	1954	364	32	228	528	747	1,060	1,537	2,354	100
151	4	4	3	4	12	14	28	64	119	1955	369	39	207	546	756	1,062	1,535	2,317	100
152	3	4	1	1	16	8	17	33	105	1956	371	35	212	531	750	1,067	1,549	2,341	100
153	3	3	0	2	10	17	24	47	105	1957	370	32	196	538	767	1,029	1,535	2,228	99
154	3	3	0	2	6	14	37	34	109	1958	383	39	214	556	757	1,089	1,525	2,351	101
155	3	3	0	2	7	13	24	56	92	1959	371	35	201	551	742	1,050	1,409	2,172	97
156	3	3	0	2	16	5	25	33	92	1960	382	33	194	569	774	1,051	1,498	2,317	100
157	4	4	1	4	8	20	25	33	117	1961	390	33	187	585	805	1,043	1,514	2,376	102

FEMALES

Cervix uteri (171)

FEMALES

Corpus uteri (172)

	111	16	79	173	289	306	359	277	97	1952	54	1	12	56	132	205	277	257	102
109	23	23	77	160	267	308	358	329	94	1953	53	2	8	54	145	177	273	230	98
110	20	20	72	172	239	302	321	304	94	1954	52	1	12	44	136	184	262	267	95
111	24	24	79	156	254	314	325	275	92	1955	50	2	8	47	129	175	237	281	91
112	27	27	78	165	235	316	328	312	91	1956	51	1	8	51	135	185	218	249	92
113	24	24	93	150	223	302	331	332	89	1957	52	2	7	45	133	179	277	201	93
114	16	16	99	178	246	304	348	378	96	1958	51	1	8	45	131	178	248	191	90
115	20	20	100	162	208	286	371	399	90	1959	52	1	8	41	130	169	237	300	91
116	21	21	109	183	192	279	354	379	90	1960	53	2	7	43	135	187	257	301	92
117	16	16	92	171	213	255	335	385	86	1961	52	0	8	45	122	197	219	312	91

MALES

Prostate (177)

FEMALES

Ovary, Fallopian tube, and broad ligament (175)

142	—	2	18	23	161	879	2,267	2,754	98	1952	110	13	59	209	285	298	280	277	98
149	—	1	23	172	890	2,364	2,706	2,754	103	1953	112	11	64	207	280	321	301	197	100
157	—	2	21	160	904	2,520	3,297	3,244	107	1954	114	14	63	202	283	318	313	292	101
156	—	2	16	152	917	2,484	3,244	3,244	105	1955	121	13	70	207	305	335	322	359	106
165	—	0	16	161	937	2,684	3,588	3,588	111	1956	121	13	74	191	323	317	348	306	106
161	—	2	14	150	929	2,558	3,302	3,302	107	1957	124	12	73	210	315	325	330	277	107
166	—	2	18	161	946	2,696	3,431	3,431	111	1958	125	12	53	199	321	332	339	255	106
164	—	1	14	154	882	2,696	3,833	3,833	109	1959	125	12	57	187	321	333	365	311	107
166	—	1	15	160	912	2,589	4,011	4,011	110	1960	125	15	62	188	312	331	374	261	107
164	—	2	14	140	869	2,772	3,880	3,880	109	1961	128	15	60	202	335	345	349	341	107

Bladder (181-0, -8)

	89	86	87	91	93	94	92	91	96	1952	32	1	5	18	50	118	273	358	97
89	1	1	1	1	1	1	1	1	1	1953	34	1	4	21	53	123	295	342	103
86	0	0	1	1	1	1	1	1	1	1954	36	2	4	15	52	147	296	391	106
87	2	2	2	2	2	2	2	2	2	1955	36	1	4	19	51	145	298	341	106
91	2	2	2	2	2	2	2	2	2	1956	36	—	4	14	42	143	294	514	104
93	1	1	1	1	1	1	1	1	1	1957	36	—	4	13	50	142	285	446	104
94	1	1	1	1	1	1	1	1	1	1958	36	—	4	16	50	140	283	472	103
92	1	1	1	1	1	1	1	1	1	1959	40	1	3	16	57	139	307	308	111
91	0	0	1	1	1	1	1	1	1	1960	39	0	4	17	50	136	320	355	106
96	—	—	1	1	1	1	1	1	1	1961	38	0	5	15	49	144	257	507	103

Table XCIII—continued

All ages	25--	35--	45--	55--	65--	75--	85 and over	S.M.R. (1950-52 = 100)	All ages	25--	35--	45--	55--	65--	75--	85 and over	S.M.R. (1950-52 = 100)
MALES																	
Other urinary organs (181.7)									FEMALES								
0	0	—	1	1	1	4	—	99	1952	—	1	1	2	3	5	—	86
1	1	—	1	1	2	4	—	98	1953	—	—	2	0	6	7	—	113
1	—	—	1	1	4	9	—	175	1954	—	0	0	3	5	3	12	111
1	—	—	1	2	3	3	—	115	1955	—	—	—	2	3	6	—	77
1	—	—	1	2	4	2	—	123	1956	—	1	—	2	5	10	12	130
1	—	—	2	1	3	12	—	186	1957	—	—	1	3	4	7	5	118
1	—	—	0	1	1	3	—	111	1958	—	—	1	1	3	1	5	61
1	—	—	0	1	6	12	11	174	1959	—	—	0	2	5	2	5	94
1	—	—	1	2	3	7	—	135	1960	—	0	1	3	1	3	10	88
1	—	—	0	3	1	8	—	134	1961	—	0	1	1	5	10	5	120
Hodgkin's disease (201)																	
23	26	23	32	45	49	36	46	106	1952	16	10	10	20	28	29	7	103
23	23	27	30	41	55	32	—	106	1953	13	12	16	22	24	24	13	106
23	24	29	30	39	51	39	27	107	1954	12	11	11	22	32	30	12	105
23	28	26	29	40	49	44	13	106	1955	12	12	14	18	30	20	42	104
24	26	28	23	49	56	47	12	108	1956	16	13	13	22	27	36	12	112
27	28	32	37	48	50	54	47	124	1957	13	11	14	23	26	30	—	104
22	25	21	29	38	45	56	34	100	1958	12	14	14	22	32	24	11	113
25	30	25	38	42	51	56	11	114	1959	14	15	13	24	28	33	36	118
23	23	29	31	44	44	44	11	106	1960	15	13	15	24	34	43	20	125
24	29	31	32	40	55	50	54	112	1961	12	9	14	21	23	36	54	108

Table XCIV. Diseases of the circulatory system, vascular lesions affecting the central nervous system, and congenital malformations of circulatory system: Death rates per million living, and Standardised Mortality Ratios (1950-52 = 100), by sex, 1951 to 1961, England and Wales

Abbreviated List No.	ICD No.		1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961
B24	400-402	Rheumatic fever	8 { M F	7 8	7 8	7 6	5 5	5 5	4 4	3 3	3 3	3 3	3 2
B25	410-416	Chronic rheumatic heart disease	194 { M F	164 247	157 240	148 237	140 232	142 223	138 225	118 208	113 196	112 196	115 205
	420	Arteriosclerotic heart disease including coronary disease..	1,789 { M F	1,874 999	1,860 1,012	2,016 1,084	2,097 1,163	2,206 1,222	2,230 1,243	2,395 1,368	2,385 1,393	2,561 1,497	2,613 1,569
B26	421	Chronic endocarditis not specified as rheumatic	64 { M F	71 63	71 60	81 64	75 67	75 59	81 70	77 65	69 66	76 66	72 69
	422	Other myocardial degeneration	1,552 { M F	1,303 1,629	1,230 1,603	1,177 1,528	1,179 1,550	1,112 1,490	976 1,335	988 1,382	868 1,275	809 1,232	789 1,232
B27	430	Acute and subacute endocarditis	10 { M F	9 6	9 6	9 5	10 5	9 5	9 6	8 6	9 5	8 6	9 5
	431-434	Other diseases of heart..	210 { M F	202 238	216 248	231 250	230 261	235 273	253 286	260 300	249 298	265 310	279 341
B28, 29	440-447	Hypertension with or without mention of heart disease..	492 { M F	440 444	451 453	457 472	458 498	444 486	419 464	400 469	362 437	353 423	331 424
B46	450	General arteriosclerosis	262 { M F	229 227	224 233	225 228	225 251	220 242	198 231	221 253	209 261	211 269	218 290
(part)	465	Pulmonary embolism and infarction	16 { M F	15 16	18 19	19 16	22 81	21 25	22 24	22 25	29 31	32 34	34 34
	Rem. of 451-468	Other circulatory diseases	49 56	65 69	68 70	76 79	81 85	89 94	95 93	101 101	104 102	111 115	118 124
	400-468	Diseases of the circulatory system	4,645 { M F	4,382 3,946	4,311 3,950	4,446 3,973	4,521 4,131	4,558 4,124	4,425 3,980	4,595 4,183	4,401 4,065	4,542 4,151	4,581 4,299
	400-468	Standardised Mortality Ratios	104 { M F	97 93	97 92	97 90	98 92	99 91	95 86	98 89	94 85	96 86	98 88
B22	330-334	Vascular lesions affecting the central nervous system	1,378 { M F	1,381 1,761	1,356 1,716	1,433 1,811	1,454 1,868	1,442 1,877	1,411 1,854	1,439 1,921	1,412 1,883	1,405 1,909	1,394 1,925
B41 (part)	754	Congenital malformations of circulatory system	50 { M F	42 35	43 34	45 33	47 33	47 34	52 39	52 37	50 39	53 43	54 44

Table XCV. Diseases of the circulatory system, vascular lesions affecting the central nervous system, and congenital malformations of circulatory system: Deaths and death rates per million living, and per 100 deaths from all circulatory diseases, by sex and age, 1961, England and Wales

Abbreviated List No.	Cause of death	Males						Females							
		All ages	0—	15—	25—	45—	65—	75 and over	All ages	0—	15—	25—	45—	65—	75 and over
324	Rheumatic fever .. {Deaths Rate .. {Per cent	56 2.5 0.1	10 1.8 17.9	7 2.3 5.9	5 0.83 0.2	20 3.5 0.1	4 2.8 0.0	10 1.5 0.0	47 2.0 0.0	8 1.6 19.0	2 0.66 2.0	8 1.32 0.6	13 2.1 0.1	7 3.3 0.0	9 6.9 0.0
	Chronic rheumatic heart disease .. {Deaths Rate .. {Per cent	2,580 115 2.5	3 0.55 5.4	31 10 26.0	451 75 16.9	1,244 219 4.3	531 371 1.8	320 464 0.8	4,892 205 4.8	3 0.58 7.1	43 14 43.0	587 97 47.6	2,095 338 17.3	1,173 557 7.6	991 765 1.5
326	Arteriosclerotic heart disease .. {Deaths Rate .. {Per cent	58,396 2,613 57.0	3 0.55 5.4	13 4.2 10.9	1,661 275 62.2	21,641 3,809 75.4	18,927 13,226 63.9	16,151 23,441 39.2	37,379 1,569 36.5	1 0.19 2.4	2 0.66 2.0	228 38 18.4	5,833 942 48.3	12,509 5,943 50.1	18,806 14,511 29.4
	Degenerative heart disease .. {Deaths Rate .. {Per cent	19,243 861 18.8	4 0.74 7.1	17 5.5 14.3	115 19 4.3	1,435 253 5.0	3,874 2,707 13.1	13,798 20,026 33.5	30,989 1,301 30.3	5 0.97 11.9	10 3.3 10.0	67 11 5.4	962 155 8.0	4,414 2,097 17.7	25,531 19,700 40.0
327	Other diseases of heart .. {Deaths Rate .. {Per cent	6,429 288 6.3	26 4.8 46.3	21 6.8 17.6	141 23 5.3	1,198 211 4.2	1,821 1,273 6.1	3,222 4,676 7.8	8,232 346 8.0	15 2.9 35.8	20 6.6 20.0	123 20 10.0	853 138 7.1	1,991 946 8.0	5,230 4,035 8.2
	Hypertension with heart disease .. {Deaths Rate .. {Per cent	4,495 201 4.4	— — —	7 2.3 5.9	44 7.3 1.6	955 168 3.3	1,519 1,061 5.1	1,970 2,859 4.8	6,730 283 6.6	1 0.19 2.4	1 0.33 1.0	21 3.5 1.7	830 134 7.1	1,897 901 7.6	3,980 3,071 6.2
329	Hypertension without mention of heart .. {Deaths Rate .. {Per cent	2,897 130 2.8	2 0.37 3.6	9 2.9 7.6	143 24 5.4	933 164 3.3	777 543 2.6	1,033 1,499 2.5	3,372 142 3.3	— — —	1 0.33 1.0	72 12 5.8	560 90 4.6	858 408 3.4	1,881 1,451 2.9
	Other circulatory diseases .. {Deaths Rate .. {Per cent	8,268 370 8.1	8 1.5 14.3	14 4.6 11.8	109 18 4.1	1,253 221 4.4	2,187 1,528 7.4	4,697 6,817 11.4	10,753 451 10.5	9 1.7 21.4	21 7.0 21.0	130 21 10.5	935 151 7.7	2,117 1,006 8.5	7,541 5,819 11.8
346 (part)	All circulatory diseases .. {Deaths Rate .. {Per cent	102,364 4,581 100	56 10 100	119 39 100	2,669 441 100	28,679 5,048 100	29,640 20,713 100	41,201 59,798 100	102,394 4,299 100	42 8.1 100	100 33 100	1,236 204 100	12,081 1,951 100	24,966 11,860 100	63,969 49,359 100
	Vascular lesions affecting central nervous system .. {Deaths Rate .. {Per cent	31,160 1,394	46 8.5	54 18	481 80	6,035 1,062	9,397 6,567	15,147 21,984	45,863 1,925	16 3.1	33 11	452 75	5,689 919	11,753 5,583	27,920 21,543
341 (part)	Congenital malformations of circulatory system .. {Deaths Rate .. {Per cent	1,214 54	975 180	51 17	73 12	87 15	23 16	5 7.3	1,056 44	793 154	48 16	83 14	85 14	36 17	11 8.5

Table XCVI. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 45-64, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1961, England and Wales

	All causes		Vascular lesions affecting central nervous system (330-334)		Chronic rheumatic heart disease and chronic endocarditis (410-416, 421)		Arteriosclerotic heart disease (420)		Myocardial degeneration (422)		Other diseases of heart (430-434)		Hypertension with or without heart disease (440-447)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES														
Regions:	13,772	7,402	1,062	919	319	380	3,809	942	152	114	211	138	332	225
Northern	14,660	7,958	1,307	1,073	279	379	4,315	1,289	171	139	230	147	302	259
East and West Ridings	14,767	8,128	1,072	1,004	376	489	4,264	1,112	163	149	211	146	296	243
North Western	16,387	8,555	1,283	1,120	375	527	4,680	1,168	196	133	295	180	301	243
North Midlands	12,823	7,111	1,142	889	310	362	3,337	812	142	113	242	145	319	205
Midland	14,094	7,364	1,118	940	361	411	3,349	849	217	123	236	150	373	221
Eastern	10,938	6,319	812	856	266	259	3,141	772	125	79	136	106	259	165
London and South Eastern	13,212	6,885	880	757	305	325	3,666	809	82	75	165	121	329	190
Southern	12,193	6,546	943	770	266	258	3,435	709	106	89	205	94	338	180
South Western	12,486	7,082	1,098	922	236	246	3,271	875	226	164	214	125	383	287
Wales (including Monmouthshire)	14,743	8,095	1,178	1,034	367	503	4,322	1,161	189	144	189	152	488	339
Conurbations	14,940	7,534	1,048	862	351	430	4,119	968	135	91	211	142	355	217
Tyneside	15,670	7,919	1,311	1,072	252	414	4,243	1,234	126	108	214	117	291	279
West Yorkshire	15,936	8,194	1,164	968	379	504	5,027	1,254	151	103	324	151	315	238
South East Lancashire	17,444	8,513	1,379	1,061	395	591	4,729	1,046	219	176	279	179	333	231
Merseyside	16,974	8,909	1,129	1,120	335	497	4,910	1,463	155	57	277	189	348	217
West Midlands	15,135	7,130	1,184	827	394	447	3,440	797	238	90	213	147	433	220
Greater London	13,551	6,955	850	729	332	352	3,800	826	77	67	155	123	356	201
Areas outside conurbations:														
Urban areas with populations of 100,000 and over	14,721	7,861	1,175	952	364	458	3,952	1,033	144	128	232	154	371	244
Urban areas with populations of 50,000 and under 100,000	14,130	7,597	1,112	1,075	272	349	3,963	925	172	129	237	132	335	196
Urban areas with populations under 50,000	13,118	7,202	1,067	927	314	331	3,730	929	167	126	207	139	298	222
Rural districts	11,608	6,982	991	935	255	299	3,176	851	166	128	193	119	303	241

Table XCVII. Diseases of the circulatory system, and vascular lesions affecting the central nervous system: Death rates per million living, by sex, at age 65 and over, in the standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1961, England and Wales

	All causes		Vascular lesions affecting central nervous system (330-334)		Chronic rheumatic heart disease and chronic endocarditis (410-416, 421)		Arteriosclerotic heart disease (420)		Myocardial degeneration (422)		Other diseases of heart (430-434)		Hypertension with or without heart disease (440-447)	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
ENGLAND AND WALES														
Regions:	82,758	60,749	11,577	11,665	861	1,039	16,546	9,208	7,876	8,403	2,379	2,123	2,500	2,533
Northern:	83,192	65,770	13,308	13,873	678	951	18,082	11,549	8,034	8,510	2,473	2,118	2,226	2,569
East and West Ridings ..	88,171	65,352	13,251	13,217	765	1,086	17,840	10,890	7,679	7,772	2,385	2,276	2,455	2,555
North Western ..	73,698	68,419	13,544	13,718	863	1,078	18,484	9,899	9,007	9,333	2,940	2,516	2,442	2,429
North Midland ..	79,465	59,773	11,706	11,466	765	939	14,200	8,279	8,629	8,684	2,729	2,425	2,582	2,579
Midland ..	80,404	59,984	11,727	11,256	662	918	14,545	8,128	8,035	9,016	2,167	2,151	2,419	2,393
Eastern ..	71,861	54,423	10,155	11,227	791	885	15,160	8,360	6,390	6,755	2,070	1,759	2,043	2,129
London and South Eastern ..	81,604	57,602	9,931	10,057	1,063	1,232	16,465	8,863	7,598	7,598	2,234	1,989	2,590	2,638
Southern ..	74,812	55,465	10,145	10,327	942	810	16,210	8,788	7,080	8,115	2,116	2,071	2,420	2,181
South Western ..	81,886	59,664	11,434	11,388	743	900	16,526	8,640	10,623	10,221	2,389	1,993	2,760	2,651
Wales (including Monmouthshire) ..	88,194	64,183	12,682	12,744	1,023	1,083	17,527	9,628	8,186	9,489	2,171	1,911	3,054	3,439
Conurbations:	86,187	61,436	11,073	10,943	1,024	1,223	17,188	9,532	6,885	7,644	2,439	2,187	2,654	2,689
Tyneside ..	86,194	64,627	13,417	13,333	694	1,074	17,806	11,148	7,111	6,852	2,306	2,019	2,528	2,926
West Yorkshire ..	89,697	64,521	13,405	13,331	621	1,162	19,895	11,877	7,132	7,077	2,579	2,508	2,684	2,338
South East Lancashire ..	94,029	69,337	13,982	13,380	980	1,189	16,922	8,823	8,765	10,000	2,971	2,503	2,382	2,371
Merseyside ..	97,820	65,756	12,600	12,989	720	911	20,980	11,089	6,380	6,478	3,240	2,978	2,620	2,522
West Midlands ..	82,077	60,904	11,648	11,648	523	932	14,264	8,342	8,242	9,541	2,055	2,021	2,648	2,596
Greater London ..	82,459	57,340	9,038	9,214	1,254	1,375	16,825	9,149	5,959	6,879	2,249	1,967	2,749	2,881
Areas outside conurbations:														
Urban areas with populations of 100,000 and over ..	88,938	63,456	12,946	12,673	904	1,096	17,862	10,077	7,423	8,264	2,385	2,124	2,731	2,794
Urban areas with populations of 50,000 and under 100,000 ..	85,206	60,609	11,842	12,093	794	915	17,552	9,299	8,345	8,495	2,176	2,075	2,309	2,263
Urban areas with populations under 50,000 ..	81,672	60,308	12,157	12,071	714	849	16,311	8,783	8,747	9,314	2,370	2,027	2,386	2,381
Rural districts ..	74,717	58,370	10,843	11,646	784	954	14,801	8,546	8,457	8,705	2,367	2,145	2,338	2,385

Table XCVIII. Congenital malformations of the circulatory system (ICD No. 754): Deaths and death rates per million living, by sex and age, 1953 to 1961, England and Wales

Age	1953		1954		1955		1956		1957		1958		1959		1960		1961	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Deaths																		
All ages	913	786	948	767	1,007	756	1,017	791	1,126	911	1,124	870	1,102	921	1,161	1,009	1,214	1,056
0- ..	623	491	647	514	645	430	677	506	725	553	726	528	724	584	747	612	793	635
1- ..	60	64	48	58	80	76	58	59	71	60	87	71	76	66	83	84	76	83
5- ..	51	37	50	42	53	55	60	49	68	55	52	53	79	67	86	83	106	75
15- ..	117	106	122	87	144	115	132	102	140	115	148	117	132	105	130	115	124	131
45- ..	46	58	60	45	67	58	65	53	94	95	86	79	69	68	85	79	87	85
65 and over	16	30	21	21	18	22	25	22	28	33	25	22	22	31	30	36	28	47
Death rates per million living*																		
All ages	43.1	34.3	44.5	33.4	47.1	32.8	47.3	34.2	52.0	39.2	51.7	37.2	50.4	39.2	52.6	42.6	54.3	44.3
0- ..	1.77	1.48	1.87	1.57	1.88	1.33	1.88	1.49	1.95	1.58	1.91	1.47	1.88	1.61	1.85	1.61	1.90	1.61
1- ..	43.1	48.2	35.3	44.8	59.4	59.2	43.3	46.3	52.6	46.8	63.7	54.7	54.6	49.9	57.7	61.5	51.4	59.2
5- ..	15.4	11.6	14.8	13.0	15.4	16.7	17.1	14.6	19.2	16.2	14.6	15.6	22.3	19.8	24.3	24.5	29.9	22.2
15- ..	12.9	11.4	13.6	9.42	16.0	12.5	14.8	11.2	15.7	12.7	16.6	13.0	14.8	11.6	14.5	12.7	13.6	14.4
45- ..	9.05	10.0	11.6	7.69	12.8	9.81	12.2	8.88	17.4	15.8	15.7	13.0	12.4	11.1	15.1	12.8	15.3	13.7
65 and over	7.98	10.1	10.4	6.93	8.85	7.15	12.2	7.03	13.5	10.3	12.1	6.79	10.6	9.43	14.3	10.7	13.2	13.8

* At ages under 1 year, per thousand live^a birth occurrences.

Table XCIX. Bronchitis (ICD Nos. 500-502): Infant mortality rates per 1,000 live births, death rates per million living at ages over one year and Standardised Mortality Ratios (1950-52 = 100), 1949 to 1961, England and Wales

	Males										S.M.R. (All ages)
	Infant mortality rate	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	
1949	0.74	29	4.4	10	16	78	492	1,962	4,270	9,534	92
1950	0.79	41	8.0	4.6	13	72	474	1,921	4,296	9,375	91
1951	0.74	46	5.5	5.1	14	93	616	2,479	5,619	12,392	118
1952	0.64	49	8.4	2.6	14	67	476	1,939	4,392	9,163	91
1953	0.70	42	5.7	5.5	11	73	486	2,036	5,007	10,062	99
1954	0.58	43	7.1	5.9	11	67	425	1,780	4,347	8,583	86
1955	0.65	48	5.8	9.5	11	73	475	1,997	4,868	9,531	96
1956	0.54	58	5.4	5.5	11	57	437	2,072	5,040	9,754	98
1957	0.45	39	4.8	4.0	11	65	431	2,034	4,683	8,503	92
1958	0.54	40	7.3	9.3	10	69	434	2,044	5,181	9,506	98
1959	0.57	40	6.2	5.2	12	53	411	1,958	5,126	9,624	96
1960	0.52	44	5.6	4.7	12	58	346	1,823	4,662	9,161	89
1961	0.44	56	5.4	5.2	11	52	378	2,062	5,548	10,718	103
	Females										S.M.R. (All ages)
	Infant mortality rate	1-	5-	15-	25-	35-	45-	55-	65-	75 and over	
1949	0.58	28	5.3	7.2	11	36	132	473	1,779	6,673	104
1950	0.57	34	4.5	6.9	10	35	107	431	1,582	6,197	95
1951	0.60	41	4.8	6.3	13	41	142	608	2,102	8,019	124
1952	0.47	37	5.2	8.5	11	29	94	369	1,375	5,241	81
1953	0.55	45	5.0	5.7	13	35	98	433	1,501	5,875	91
1954	0.41	30	6.8	5.3	8.2	24	95	330	1,133	4,358	68
1955	0.41	25	3.6	4.6	11	29	94	366	1,321	4,768	76
1956	0.35	31	4.5	4.0	10	34	89	384	1,293	4,889	77
1957	0.35	34	6.5	5.0	12	30	93	330	1,104	3,547	61
1958	0.40	32	5.3	6.4	11	31	103	390	1,168	4,067	68
1959	0.47	32	3.5	4.5	8.2	30	92	359	1,161	3,883	65
1960	0.40	28	3.3	2.4	7.2	23	85	288	916	3,277	54
1961	0.34	34	5.0	5.0	8.7	31	101	342	1,192	3,847	65

Table C. Bronchitis: Death rates per million living, by sex, at ages 15-44, 45-64, and 65 and over, and Standardised Mortality Ratios, in standard regions and urban and rural aggregates within regional groups, 1961, England and Wales

	15-		45-		65 and over		S.M.R. (Persons all ages)
	M	F	M	F	M	F	
ENGLAND AND WALES	23	15	1,123	214	7,228	2,204	100
Urban and rural aggregates:							
Conurbations	28	17	1,368	251	9,093	2,836	124
Areas outside conurbations:							
Urban areas with populations of 100,000 and over	26	14	1,251	253	8,508	2,423	114
Urban areas with populations of 50,000 and under 100,000	16	17	1,165	213	6,909	1,968	93
Urban areas with populations under 50,000	23	13	1,009	194	6,390	1,756	87
Rural districts	16	15	702	139	4,832	1,571	69
NORTH OF ENGLAND	35	24	1,543	310	8,448	2,865	128
Regions:							
Northern	32	20	1,281	213	6,418	2,137	101
East and West Ridings	36	11	1,518	337	8,599	2,734	128
North Western	36	35	1,683	337	9,389	3,257	141
Conurbations	38	26	1,779	357	9,758	3,374	146
Tyneside	24	35	1,359	252	8,139	2,685	121
West Yorkshire	41	3	1,566	329	8,461	2,769	124
South East Lancashire	39	38	2,141	401	11,049	4,286	173
Merseyside	41	28	1,645	377	10,260	2,889	143
Areas outside conurbations:							
Urban areas with populations of 100,000 and over	30	23	1,629	389	9,582	3,059	141
Urban areas with populations of 50,000 and under 100,000	38	28	1,691	211	8,482	2,586	125
Urban areas with populations under 50,000	37	16	1,289	263	7,374	2,409	112
Rural districts	25	31	983	200	5,391	1,713	84
WALES AND MIDLANDS	25	13	1,201	225	7,445	2,232	106
Regions:							
Wales	17	18	1,234	198	8,070	1,744	107
North Midland	21	13	1,073	222	6,865	2,283	100
Midland	32	11	1,283	243	7,535	2,479	110
Conurbation:							
West Midlands	45	14	1,624	267	8,978	2,856	131
Areas outside conurbation:							
Urban areas with populations of 100,000 and over	34	7	1,346	243	9,712	2,670	130
Urban areas with populations of 50,000 and under 100,000	7	22	1,216	323	7,143	2,545	110
Urban areas with populations under 50,000	18	16	1,188	217	7,417	1,888	101
Rural districts	15	11	777	161	5,254	1,782	77
SOUTH AND EAST OF ENGLAND (excluding Greater London)	14	10	674	132	5,216	1,467	67
Regions:							
London and South Eastern (excluding Greater London)	14	11	756	135	5,761	1,465	70
Southern	8	9	734	116	4,935	1,531	67
South Western	18	14	602	134	4,920	1,363	62
Eastern	14	7	634	140	5,225	1,524	68
Urban areas with populations of 100,000 and over	14	12	855	154	6,775	1,825	84
Urban areas with populations of 50,000 and under 100,000	6	9	785	174	5,954	1,507	71
Urban areas with populations under 50,000	18	9	686	134	5,164	1,345	64
Rural districts	13	11	533	100	4,370	1,406	59
GREATER LONDON	14	11	986	166	8,611	2,435	105

Table CI. Accidents and violence: Proportion of deaths attributed to violent causes per 100 deaths from all causes, by sex and age, 1901 to 1961, England and Wales

		Males					Females				
		All ages	0-	15-	35-	65 and over	All ages	0-	15-	35-	65 and over
1901-10	..	5.05	3.22	12.88	7.22	2.31	2.31	2.85	3.06	2.18	1.54
1911-20	..	5.69	3.74	15.69	7.16	2.29	2.31	2.95	2.97	2.26	1.63
1921-30	..	5.48	4.43	15.49	7.06	2.37	2.49	3.06	4.02	2.74	1.79
1931-35	..	6.05	5.60	20.29	7.37	2.55	3.04	4.11	5.54	3.31	2.25
1936-40	..	7.30	7.30	29.58	8.67	2.89	4.10	5.73	9.52	4.82	2.83
1941-45	..	9.13	10.34	46.29	9.46	2.85	4.56	8.25	12.26	5.58	2.74
1946-50	..	4.81	8.50	26.26	6.01	2.07	2.91	6.53	5.86	3.50	2.16
1951-55	..	4.70	10.02	38.58	6.07	2.09	3.09	7.47	10.34	3.89	2.39
1956	..	4.85	9.90	43.90	6.36	2.32	3.50	7.70	13.78	4.71	2.76
1957	..	4.83	9.30	43.18	6.24	2.28	3.50	7.13	13.97	4.62	2.77
1958	..	4.93	10.07	48.19	6.53	2.22	3.56	7.26	16.44	4.75	2.82
1959	..	4.99	10.02	49.98	6.22	2.33	3.64	7.38	18.41	4.96	2.84
1960	..	5.02	9.76	52.42	6.41	2.16	3.74	7.03	21.74	5.39	2.85
1961	..	4.86	10.04	51.69	6.15	2.12	3.56	6.70	23.04	5.13	2.70

Table CII. Accidents and violence: Death rates per million living, by sex and age, 1901 to 1961, England and Wales

	All ages	0-	5-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over
Males												
1901-10	..	827	1,231	329	262	447	555	677	914	1,257	1,623	2,621
1911-20	..	857	934	395	304	596	902	828	894	1,082	1,395	2,757
1921-30	..	709	683	375	243	449	584	536	658	917	1,259	2,842
1931-40	..	843	735	394	261	561	773	658	716	977	1,375	3,638
1941-50	..	778	726	459	319	571	648	582	613	781	1,075	2,832
1951	..	591	487	259	190	362	608	474	429	591	814	1,137
1952	..	568	473	217	167	415	643	445	436	546	796	1,092
1953	..	582	418	215	151	373	603	446	429	583	822	1,198
1954	..	593	393	168	161	369	580	426	445	583	846	1,256
1955	..	605	386	207	181	444	671	446	444	567	823	1,243
1956	..	604	392	173	151	410	608	442	428	578	874	1,259
1957	..	594	351	168	156	456	644	421	456	566	845	1,197
1958	..	614	361	196	163	481	636	469	483	584	854	1,130
1959	..	615	352	185	164	574	704	448	442	560	833	1,261
1960	..	612	334	210	160	576	767	460	458	593	820	1,067
1961	..	611	358	203	160	599	687	473	483	567	784	1,114
Females												
1901-10	..	329	1,059	226	81	103	111	135	198	307	423	752
1911-20	..	300	767	234	98	117	120	127	179	272	382	728
1921-30	..	283	487	182	71	117	127	126	168	268	397	716
1931-40	..	412	537	215	108	183	192	199	239	355	523	1,005
1941-50	..	407	546	231	135	169	179	187	221	313	446	791
1951	..	321	350	96	45	88	87	85	126	228	327	648
1952	..	298	330	100	50	77	86	85	120	213	322	604
1953	..	329	319	94	62	73	86	88	139	232	349	670
1954	..	358	264	86	48	81	90	107	138	239	357	783
1955	..	370	300	94	59	94	85	96	143	241	377	775
1956	..	383	284	87	52	76	91	101	140	260	412	764
1957	..	374	279	83	45	79	98	103	145	258	396	762
1958	..	390	255	86	52	91	115	103	148	271	380	792
1959	..	399	259	82	67	101	130	113	156	253	416	784
1960	..	406	224	95	65	117	131	122	170	282	429	776
1961	..	406	250	73	42	148	137	129	175	278	402	802

Table CIII. Motor vehicle accidents: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1931 to 1961, England and Wales

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	S.M.R.† (1950-52 = 100)
Males												
1931-35 ..	208	184	93	204	368	210	133	153	206	363	678	143
1936-40 ..	216	159	86	176	363	209	152	171	257	411	749	146
1941-45 ..	199	198	113	152	227	193	149	160	228	353	556	130
1946 ..	153	144	109	161	205	139	109	102	160	241	498	99
1947 ..	146	134	75	127	209	139	106	111	147	246	460	95
1948 ..	126	135	63	122	173	112	79	97	142	194	400	82
1949 ..	140	123	80	147	226	117	103	101	137	229	451	91
1950 ..	151	104	60	177	279	164	106	102	153	242	439	98
1951 ..	161	112	88	178	308	174	112	117	160	231	505	105
1952 ..	149	105	73	165	301	150	123	105	144	219	403	97
1953 ..	158	98	61	170	307	164	110	126	160	245	518	103
1954 ..	161	77	57	194	323	165	116	127	170	259	564	105
1955 ..	171	83	64	234	388	170	125	130	164	273	540	111
1956 ..	174	86	61	236	344	182	121	138	185	270	587	113
1957 ..	170	74	58	254	378	164	130	125	166	263	604	111
1958* ..	186	81	68	305	386	175	140	142	191	271	638	121
1959* ..	202	77	67	384	476	180	137	147	207	319	626	131
1960* ..	215	83	63	411	476	200	151	173	221	301	678	140
1961* ..	213	83	70	417	438	202	152	149	196	328	747	138
Females												
1931-35 ..	68	106	34	49	50	31	29	49	95	181	267	169
1936-40 ..	64	84	30	49	48	29	27	45	85	173	279	158
1941-45 ..	56	106	42	42	40	29	26	37	61	107	172	128
1946 ..	47	72	30	36	27	21	20	27	56	100	185	105
1947 ..	47	71	26	37	23	17	22	33	54	100	177	104
1948 ..	43	79	31	25	16	14	19	21	49	101	157	96
1949 ..	41	65	32	32	30	10	16	22	44	95	151	91
1950 ..	46	64	25	40	30	17	19	35	48	84	200	101
1951 ..	49	58	22	47	37	19	23	35	54	101	198	107
1952 ..	42	52	21	34	31	19	18	28	43	94	168	92
1953 ..	45	56	25	36	37	16	18	33	49	87	181	97
1954 ..	51	45	15	36	37	23	23	32	63	120	218	109
1955 ..	55	52	26	58	45	22	26	32	57	121	235	117
1956 ..	56	47	22	42	40	26	26	38	63	129	236	119
1957 ..	53	42	22	42	46	24	22	37	59	117	222	111
1958* ..	60	43	23	50	49	29	23	43	65	144	254	126
1959* ..	69	48	25	60	67	32	28	48	81	146	289	143
1960* ..	80	46	34	78	62	36	38	61	101	173	306	165
1961* ..	79	55	20	93	63	42	37	54	82	182	298	163

* According to the Seventh Revision of the International Classification (Nos. E810-E835). Other years according to the classification in use at the time.

† S.M.Rs. are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table CIV. Motor vehicle accidents: Deaths by sex according to nature of injury and external cause, 1961, England and Wales

External cause of injury and ICD No.		MOTOR VEHICLE TRAFFIC ACCIDENTS										Remainder of E810-E835
Nature of injury (Intermediate List)	Total	Total deaths in motor vehicle accidents E810-E835	E812 to pedestrian	E813 to pedal cyclist	E814 to rider or passenger of motorcycle with non-motor vehicle or object	E815 to rider or passenger of motorcycle in collision with other motor vehicle	E816 Other motor vehicle accident involving two or more motor vehicles	E821 to rider of motorcycle without antecedent collision	E822 involving overturning in roadway	E823 involving running off roadway	E824 Other non-collision motor vehicle accident	
AN 138 Fracture of skull	4,753	1,881	1,512	481	48	925	746	409	47	349	66	170
	1,881		1,129	74	2	85	370	38	16	101	30	36
AN 139 Fracture of spine and trunk	2,298		683	289	32	520	260	260	17	145	37	55
	803		471	46	1	42	144	20	9	43	16	11
AN 140 Fracture of limbs	2,353		219	41	3	54	63	22	9	41	5	18
	285		207	5	—	12	43	—	1	13	2	6
AN 141 Dislocation without fracture	213		126	13	—	31	26	3	—	5	—	4
	121		94	3	—	1	11	—	—	5	—	4
AN 142 Sprains and strains of joints and adjacent muscles	14		4	1	2	—	3	2	—	2	—	—
	10		2	—	—	—	4	1	—	—	—	—
AN 143 Head injury (excluding fracture)	591		212	62	4	108	90	53	8	33	7	14
	237		142	11	1	9	41	11	1	12	4	5
AN 144 Internal injury of chest, abdomen, and pelvis	776		172	56	4	146	213	50	9	78	5	43
	259		126	6	—	13	86	5	3	16	2	2
AN 145 Laceration and open wounds	90		27	2	—	18	26	4	1	4	—	8
	46		24	—	—	1	14	1	—	2	1	3
AN 146 Superficial injury, contusion and crushing with intact skin surface	5		2	—	—	1	3	—	—	—	—	—
	8		5	—	—	—	—	—	—	—	—	—
AN 147 Effects of foreign body entering through orifice	1		—	—	—	—	—	—	—	—	—	—
	1		—	—	—	—	—	—	—	—	—	—
AN 148 Burns	12		—	—	—	—	—	—	—	—	—	—
	5		—	—	—	—	—	—	—	—	—	—
AN 149 Effects of poisons	2		—	—	—	—	4	—	1	—	—	—
	1		—	—	—	—	1	—	—	2	2	—
AN 150 All other and unspecified effects of external causes	276		67	17	3	47	60	15	—	—	—	25
	106		58	3	—	7	23	—	1	6	1	7

Table CV. Deaths of pedestrians, pedal cyclists, motorcyclists, motor vehicle occupants, and others in motor vehicle traffic accidents, motor vehicle non-traffic accidents, and other road vehicle accidents, by sex, 1941 to 1961, England and Wales

	1941-45 (annual average)		1946-49 (annual average)		1950-54 (annual average)		1955-59 (annual average)		1960		1961											
	M	F	M	F	M	F	M	F	M	F	M	F										
Pedestrians:																						
Motor vehicle traffic accidents	2,073	898	1,295	706	1,185	719	1,265	858	1,488	1,174	1,512	1,129										
Motor vehicle non-traffic acci- dents ..													79	47	43	8	43	6	36	6	50	4
Other road vehicle accidents ..													63	36	63	36	34	28	20	25	19	23
Pedal cyclists:																						
Motor vehicle traffic accidents	557	140	464	86	462	77	459	73	477	91	481	74										
Motor vehicle non-traffic acci- dents ..													159	29	—	—	1	—	2	—	1	—
Other road vehicle accidents ..													230	51	138	27	112	17	88	14	71	11
Motorcyclists:																						
Motor vehicle traffic accidents	651	27	659	48	1,018	83	1,234	102	1,529	151	1,382	125										
Motor vehicle non-traffic acci- dents ..													8	—	9	—	10	—	12	—		
Motor vehicle occupants and others:																						
Motor vehicle traffic accidents	762	167	549	155	519	175	867	321	1,182	465	1,294	547										
Motor vehicle non-traffic acci- dents ..													26	6	64	2	25	1	30	2	21	2
Other road vehicle accidents ..													47	11	27	11	11	8	6	7	8	12

Table CVI. Suicide: Death rates per million living, by sex and age, in standard regions, conurbations, and urban and rural aggregates outside the conurbations, 1957-61, England and Wales

	Males					Females				
	All ages over 15	15-	25-	45-	65 and over	All ages over 15	15-	25-	45-	65 and over
ENGLAND AND WALES	187	48	123	255	386	115	23	69	170	177
Urban and rural aggregates:										
Conurbations	204	66	138	271	412	129	29	82	185	204
<i>Areas outside conurbations:</i>										
Urban areas with populations of 100,000 and over ..	191	39	117	248	469	127	27	74	186	205
Urban areas with populations of 50,000 and under 100,000	207	50	142	273	435	131	14	81	196	202
Urban areas with populations under 50,000	181	44	116	245	361	106	19	54	165	166
Rural districts	155	30	98	232	311	81	16	53	122	112
Regional summary:										
Northern	180	43	119	254	378	87	14	58	134	134
East and West Ridings ..	202	54	137	273	391	116	29	62	168	203
North Western	214	62	134	288	449	131	24	67	191	231
North Midland	169	38	102	235	377	104	13	65	146	187
Midland	184	38	113	251	466	109	23	58	173	187
Eastern	163	36	105	234	325	107	25	59	167	157
London and South Eastern ..	197	67	137	259	367	131	30	92	188	181
Southern	160	39	116	218	344	102	18	66	163	130
South Western	188	29	123	253	408	110	17	65	162	160
Wales (including Monmouthshire)	159	28	100	223	320	82	18	50	129	116
Conurbations:										
Tyneside	206	56	124	282	478	107	14	67	152	205
West Yorkshire	216	71	144	282	416	127	35	68	164	232
South East Lancashire ..	237	77	153	322	466	131	22	67	192	223
Merseyside	163	37	115	243	315	97	16	60	148	172
West Midlands	184	45	117	240	490	119	27	62	185	220
Greater London	203	75	145	265	384	138	35	99	196	194

Table CVII. Suicide: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1901 to 1961, England and Wales

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	S.M.R.* (1950-52 = 100)
Males												
1901-10 ..	157	<i>I</i>	4	36	91	152	252	397	523	508	382	170
1911-20 ..	130	—	3	32	69	122	196	278	389	405	350	138
1921-30 ..	166	—	2	31	78	111	211	346	487	513	438	149
1931-35 ..	196	<i>0</i>	2	40	96	140	210	379	542	533	483	163
1936-40 ..	172	—	2	32	89	118	177	284	462	477	466	113
1941-45 ..	126	—	3	43	72	100	128	185	271	347	382	93
1946 ..	138	—	5	31	49	94	154	200	300	391	465	103
1947 ..	136	—	3	35	59	94	123	209	314	382	480	100
1948 ..	144	—	2	29	74	86	134	219	338	469	388	108
1949 ..	144	—	<i>I</i>	32	60	80	134	236	334	422	490	109
1950 ..	136	—	<i>I</i>	30	60	70	122	222	323	416	421	102
1951 ..	135	—	6	24	53	78	120	213	303	410	477	100
1952 ..	132	—	<i>I</i>	34	55	78	120	198	320	389	413	98
1953 ..	142	—	<i>I</i>	28	67	89	126	222	325	411	480	106
1954 ..	149	—	3	26	59	93	145	235	340	430	439	110
1955 ..	143	—	4	26	54	97	130	213	322	422	463	105
1956 ..	149	—	2	25	65	94	130	221	350	426	490	109
1957 ..	146	—	2	27	60	94	135	217	344	404	475	107
1958 ..	146	—	2	28	64	104	147	219	329	366	457	106
1959 ..	142	—	2	29	54	105	135	206	316	417	406	104
1960 ..	139	—	2	30	86	115	139	200	308	329	384	101
1961 ..	135	—	<i>I</i>	34	71	108	147	203	283	331	388	98
Females												
1901-10 ..	49	—	3	34	45	56	81	109	108	88	49	103
1911-20 ..	47	—	2	30	41	50	74	100	102	81	52	92
1921-30 ..	63	—	<i>I</i>	25	43	57	87	135	143	108	63	110
1931-35 ..	80	—	<i>0</i>	23	49	77	108	154	166	134	84	129
1936-40 ..	79	—	<i>I</i>	14	38	65	99	155	169	142	89	122
1941-45 ..	62	—	<i>I</i>	9	22	52	77	108	128	117	73	91
1946 ..	74	—	<i>I</i>	15	26	53	87	135	157	146	92	108
1947 ..	76	—	—	10	28	51	80	134	160	166	114	110
1948 ..	78	—	—	11	20	50	80	141	183	173	98	113
1949 ..	75	—	<i>I</i>	15	26	45	77	127	165	165	138	109
1950 ..	70	—	<i>I</i>	10	23	34	75	124	157	153	115	101
1951 ..	72	—	—	9	20	38	66	135	160	167	105	103
1952 ..	68	—	<i>I</i>	11	12	35	66	118	154	164	97	97
1953 ..	76	—	3	10	22	39	79	127	167	171	127	108
1954 ..	81	—	—	12	23	52	77	135	167	198	130	115
1955 ..	84	—	<i>I</i>	7	19	45	75	148	190	201	126	119
1956 ..	90	—	<i>I</i>	11	27	49	71	156	203	217	141	126
1957 ..	92	—	<i>I</i>	12	30	47	80	145	214	230	136	129
1958 ..	91	—	—	13	33	50	83	151	190	208	162	127
1959 ..	89	—	<i>I</i>	14	33	50	88	140	200	195	137	124
1960 ..	87	—	2	15	38	56	86	147	180	186	119	121
1961 ..	91	—	<i>I</i>	14	32	55	93	157	194	192	130	127

* S.M.Rs. are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table CVIII. Suicide: Proportions per 1,000 deaths according to external agent, by sex and age, 1957-61, England and Wales

	Males					Females				
	All ages 15 and over	15-	35-	55-	75 and over	All ages 15 and over	15-	35-	55-	75 and over
Domestic gas poisoning ..	450	483	445	436	485	539	571	503	552	580
Other poisoning	156	159	203	133	77	254	230	286	242	209
Hanging or strangulation..	151	135	139	165	159	60	40	63	62	65
Drowning	81	43	62	101	119	92	63	90	100	91
Firearms or explosives ..	60	77	57	58	51	5	15	6	2	2
Cutting and piercing instruments	38	18	28	47	64	11	7	11	12	14
Jumping from high place ..	22	24	19	23	24	20	25	17	20	34
Other agents	42	61	47	37	21	19	49	24	10	5
Total	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total number of suicides ..	15,529	2,247	5,489	6,356	1,437	10,581	1,095	3,804	4,835	847

Table CIX. Accidents in the home and residential institutions: Deaths and death rates per million living, by sex and age, 1961, England and Wales

	All accidents in the home and residential institutions (E870-E936)		Poisoning by utility gas (illuminating) (E890)		Burns and scalds (E916, E917)		Fall on stairs, from ladders, and from one level to another (E900-E902)		Fall on same level (E903)		Unspecified falls (E904)		Other accidents in the home and residential institutions (rem. E870-E936)	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
All ages ..	2,481 111	4,401 185	354 16	537 23	242 11	398 17	481 22	648 27	447 20	1,504 63	256 11	749 31	701 31	565 24
0-4 ..	377 200	253 142	3 1.6	4 2.2	38 20	41 23	31 16	17 9.5	2 1.1	1 0.6	1 0.5	2 1.1	302 160	188 105
5-14 ..	58 16	35 10	5 1.4	4 1.2	5 1.4	22 6.5	3 0.8	1 0.3	2 0.6	—	—	1 0.3	43 12	7 2.1
15-44 ..	260 29	177 20	53 5.8	37 4.1	30 3.3	31 3.4	33 3.6	15 1.7	5 0.5	4 0.4	2 0.2	4 0.4	137 15	86 9.5
45-64 ..	426 75	385 62	91 16	77 12	40 7.0	44 7.1	108 19	59 9.5	18 3.2	45 7.3	21 3.7	27 4.4	148 26	133 21
65-74 ..	347 242	712 339	56 39	117 56	45 31	76 36	90 63	125 59	82 57	199 95	40 28	114 54	34 24	81 38
75 and over ..	1,013 1,470	2,839 2,191	146 212	298 230	84 122	184 142	216 313	431 333	338 491	1,255 968	192 279	601 464	37 54	70 54

Table CX. Accidents in the home and residential institutions: Deaths by month of occurrence, 1952-57, and 1958 to 1961, England and Wales

ICD No.	Cause of death	PERSONS											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
E870-E888	Poisoning	104	96	110	100	98	82	88	97	86	112	83	90
		18	12	25	29	11	23	21	10	15		21	27
		27	19	21	24	25	25	17	20	19		20	11
		33	30	35	31	30	32	20	24	24		24	34
		33	34	29	43	21	24	14	28	24		26	31
E890-E895	Gas poisoning .. .	529	566	395	301	231	188	166	164	200	296	447	463
		116	61	105	80	46	59	38	41	43	64	94	140
		161	127	101	68	49	40	31	45	41	46	91	97
		137	108	89	54	62	34	43	45	57	78	100	172
		1960	137	89	62	50	31	33	46	46	54	93	202
		1961	174	107	82	73	287	316	346	344	395	449	566
E900 ..	Fall on stairs .. .	556	476	451	363	342	287	316	346	344	395	449	566
		123	78	93	71	62	53	48	56	60	54	61	85
		1958	98	73	52	49	49	57	57	65	59	77	86
		1959	90	66	63	53	57	60	49	66	56	76	122
		1960	75	57	47	43	48	50	52	44	68	71	93
		1961	108	75	57	47	24	25	20	28	27	20	20
E901 ..	Fall from ladders ..	16	14	25	18	2	3	2	2	6	2	5	2
		5	1	2	5	2	3	1	7	7	2	6	4
		1958	4	2	3	5	3	3	2	7	5	3	—
		1959	3	2	2	1	3	3	1	7	9	3	—
		1960	3	3	2	4	3	3	6	7	5	3	—
		1961	3	3	5	1	4	1	1	2	1	5	3
E902 ..	Other falls from one level to another	235	203	208	196	198	182	198	160	171	195	169	183
		31	22	38	37	24	24	33	29	36	39	31	37
		1958	37	49	45	53	25	25	36	29	32	35	28
		1959	35	29	38	26	29	27	24	21	18	22	36
		1960	35	29	38	26	29	27	24	21	18	22	36
		1961	39	27	23	25	26	23	31	30	28	30	40
E903 ..	Fall on same level ..	688	706	670	527	531	532	509	540	538	591	578	650
		148	131	144	134	123	103	111	119	122	131	135	166
		1958	172	211	175	132	130	131	119	106	134	132	162
		1959	154	203	223	138	151	152	136	153	169	156	178
		1960	185	186	190	131	133	152	135	141	136	188	224
		1961	929	851	922	747	705	601	545	613	675	704	857
E904 ..	Unspecified falls ..	172	140	158	128	161	136	85	96	67	79	104	142
		148	148	146	156	103	90	79	80	73	90	94	115
		1958	144	158	128	161	136	85	96	67	79	104	142
		1959	144	148	146	156	103	79	80	73	90	94	115
		1960	124	111	93	95	77	76	72	78	96	78	111
		1961	138	101	96	83	69	64	66	73	68	62	98
E914 ..	Accident caused by electric current	22	15	25	19	14	19	4	30	21	24	31	22
		9	6	4	4	2	5	4	4	4	4	4	8
		1958	3	2	4	3	5	4	6	8	3	2	4
		1959	2	2	2	3	4	3	6	8	3	2	4
		1960	2	2	4	4	5	4	6	8	3	2	4
		1961	—	5	3	3	7	8	6	3	1	3	4
E916 ..	Accident caused by fire and explosion of combustible material ..	500	549	398	307	177	172	143	123	126	220	282	426
		86	71	96	61	33	29	25	14	15	29	33	80
		1958	122	111	69	42	33	22	23	17	28	49	63
		1959	81	89	84	34	30	15	23	15	31	48	90
		1960	92	64	63	46	29	22	18	23	27	61	94
		1961											

E917	..	Accident caused by hot substance, corrosive liquid, and steam	1952-57 1958 1959 1960 1961	70 24 11 17 15	67 11 14 10 7	64 17 7 6	58 18 8 2	45 8 11 5	56 9 8 2	35 2 6 4	30 7 4 3 8	31 5 4 2 6	48 5 7 3 7	60 6 6 6	45 11 14 10 8
E921	..	Inhalation and ingestion of food causing obstruction or suffocation	1952-57 1958 1959 1960 1961	226 37 31 34 34	192 35 34 34 37	235 38 31 22 39	187 36 33 28 31	149 32 15 33 28	123 16 21 17 27	128 18 18 29 14	96 17 19 26 26	132 22 14 32 34	173 32 17 21 34	153 27 34 25 38	214 29 41 42 44
E924	..	Accidental mechanical suffocation in bed and cradle	1952-57 1958 1959 1960 1961	138 18 18 17 8	109 20 13 11 11	115 25 11 11 4	97 15 8 7 10	101 10 10 15 10	96 10 11 10 11	87 8 6 10 12	92 11 8 12 9	78 8 13 4 9	97 13 10 8 12	106 25 9 10 9	121 15 19 15 21
E929	..	Drowning and submersion	1952-57 1958 1959 1960 1961	16 5 5 5 4	19 5 6 3 2	28 8 5 7 6	38 10 3 5 4	35 9 3 5 6	52 6 5 8 4	28 2 6 5 6	33 3 7 8 8	35 6 6 5 5	29 6 3 2 3	27 5 6 6 6	21 2 2 7 4
Rem. E870- E936	..	All other accidents	1952-57 1958 1959 1960 1961	169 22 21 19 15	257 31 24 22 23	129 19 19 20 19	130 21 15 29	121 17 26 26 30	107 26 28 27 21	102 20 20 25 15	114 14 28 23 19	95 17 30 26	87 24 19 28 16	81 19 12 21 23	84 25 20 21 23
E870-E936	..	All accidents in the home and residential institutions	1952-57 1958 1959 1960 1961	4,198 814 852 739 853	4,120 621 854 727 684	3,775 774 707 689 622	3,088 636 541 556 529	2,774 540 516 540 481	2,521 502 463 467 460	2,456 417 422 470 418	2,390 423 459 435 458	2,498 426 419 504 466	2,969 494 576 549 478	3,190 570 578 549 623	3,762 771 680 844 889

Table CXI. Accidents in the home and residential institutions: Deaths by cause and sex at age 65 and over, 1961, England and Wales

ICD No.	Cause of death	Home			Residential institutions		
		Males	Females	Persons	Males	Females	Persons
E870-E888	Accidental poisoning by solid and liquid substances	18	49	67	—	2	2
E871 ..	Accidental poisoning by barbituric acid and derivatives	12	37	49	—	—	—
E883 ..	Accidental poisoning by corrosive aromatics, acids, and caustic alkalis	1	1	2	—	1	1
Rem. E870-E888	Accidental poisoning by other solid and liquid substances	5	11	16	—	1	1
E890-E895	Accidental poisoning by gases and vapours	206	424	630	—	—	—
E890 ..	Accidental poisoning by utility (illuminating) gas	202	415	617	—	—	—
Rem. E890-E895	Accidental poisoning by other gases and vapours	4	9	13	—	—	—
E900-E904	Accidental falls	727	2,088	2,815	231	637	868
E900 ..	Fall on stairs	191	377	568	12	17	29
E901 ..	Fall from ladders	15	6	21	—	—	—
E902 ..	Other falls from one level to another ..	50	91	141	38	65	103
E903 ..	Fall on same level	269	1,013	1,282	151	441	592
E904 ..	Unspecified falls	202	601	803	30	114	144
E910-E936	Other accidents	156	316	470	22	37	59
E916 ..	Accident caused by fire and explosion of combustible material	103	233	336	7	3	10
E917 ..	Accident caused by hot substance, corrosive liquid, and steam	16	21	37	3	3	6
E921 ..	Inhalation and ingestion of food causing obstruction or suffocation	15	16	31	6	19	25
E929 ..	Accidental drowning and submersion	3	15	18	—	3	3
Rem. E910-E936	Remainder of other accidents ..	19	31	48	6	9	15
E870-E936	All accidents in the home and residential institutions	1,107	2,877	3,984	253	676	929

Table CXII. Accidents in the home and residential institutions: Deaths by cause, sex, and age, 1961, England and Wales

ICD No.	Cause of death	All ages	0-	5-	15-	45-	65-	75 and over
E870-E888	Accidental poisoning by solid and liquid substances {M F	154 176	17 11	4 1	49 43	66 70	10 33	8 18
E871 ..	Accidental poisoning by barbituric acid and derivatives {M F	108 118	1 1	3 —	39 32	53 48	7 24	5 13
E872 ..	Accidental poisoning by aspirin and salicylates {M F	15 26	6 3	— —	3 2	3 14	1 6	2 1
E890-E895	Accidental poisoning by gases and vapours {M F	389 557	5 4	7 4	65 44	106 81	59 123	147 301
E900 ..	Fall on stairs {M F	291 453	5 3	1 —	17 9	65 47	64 97	139 297
E901 ..	Fall from ladders {M F	32 8	— —	— —	5 —	12 2	9 1	6 5
E902 ..	Other falls from one level to another {M F	158 187	26 14	2 1	11 6	31 10	17 27	71 129
E903 ..	Fall on same level {M F	447 1,504	2 1	2 —	5 4	18 45	82 199	338 1,255
E904 ..	Unspecified falls {M F	256 749	1 2	— 1	2 4	21 27	40 114	192 601
E914 ..	Accident caused by electric current .. {M F	36 19	8 3	7 1	13 6	6 6	1 2	1 1
E916 ..	Accident caused by fire and explosion of combustible material {M F	202 362	23 35	4 22	29 30	36 39	37 68	73 168
	Burns by clothing {M F	44 190	2 15	— 20	4 18	6 19	6 37	26 81
	from domestic fire (open) {M F	7 74	— 8	— 11	— 10	1 6	1 12	5 27
	gas fire, stove, etc. {M F	2 15	— 1	— 2	— 3	— 1	— 3	2 5
	electric fire {M F	9 38	— —	— 2	1 2	2 1	— 6	6 27
	other specified {M F	18 37	— 5	— 3	2 2	3 8	4 6	9 13
	not specified {M F	8 26	2 1	— 2	1 1	— 3	1 10	4 9
	Burns by falling into fire {M F	27 48	1 1	— 1	2 —	4 5	4 11	16 30
	Burns by conflagration {M F	58 54	15 15	3 1	11 8	13 7	8 6	8 17
	Burns by other specified means {M F	55 53	4 3	1 —	9 3	7 4	16 12	18 31
	Burns by means not specified {M F	18 17	1 1	— —	3 1	6 4	3 2	5 9
E917 ..	Accident caused by hot substance, corrosive liquid, and steam {M F	40 36	15 6	1 —	1 1	4 5	8 8	11 16
E921 ..	Inhalation and ingestion of food causing obstruction or suffocation {M F	227 159	147 83	2 2	21 15	36 24	9 15	12 20
E924 ..	Accidental mechanical suffocation in bed and cradle {M F	71 51	70 47	— —	1 1	— 1	— 1	— 1
E929 ..	Accidental drowning and submersion {M F	28 31	14 2	2 —	3 3	6 8	1 11	2 7
Rem. E870-E936	Other accidents {M F	150 109	44 42	26 3	38 11	19 18	10 15	13 20
E870-E936	All accidents in the home and residential institutions {M F	2,481 4,401	377 253	58 35	260 177	426 383	347 714	1,013 2,839

Table CXIII. Accidental falls: Death rates per million living, by sex and age, and Standardised Mortality Ratios by sex, 1901 to 1961, England and Wales

	All ages	0-	10-	15-	20-	25-	35-	45-	55-	65-	75 and over	S.M.R.† (1950-52 = 100)
Males												
1901-10	84	45	25	23	24	39	69	119	209	420	1,253	169
1911-20	107	38	30	39	36	56	93	155	254	454	1,373	213
1921-30	85	25	18	31	31	37	56	93	161	352	1,306	146
1931-35	93	25	18	31	33	37	47	79	146	338	1,609	146
1936-40	120	31	24	34	40	51	58	95	177	414	1,910	178
1941-45	109	35	26	40	30	41	58	87	157	337	1,448	156
1946	86	27	21	25	26	30	43	57	107	245	1,203	115
1947	97	31	26	33	42	36	50	68	108	254	1,352	126
1948	80	27	22	22	27	37	41	49	85	211	1,122	104
1949	78	20	18	28	31	33	38	57	68	185	1,162	100
1950	74	14	18	19	25	29	34	50	71	183	1,139	93
1951	86	17	17	17	34	35	40	51	85	241	1,275	108
1952	79	16	17	23	30	30	40	47	78	221	1,169	99
1953	84	14	10	22	29	30	33	52	80	246	1,254	104
1954	99	11	9	20	23	27	39	52	86	280	1,659	122
1955	94	14	16	13	25	28	38	44	85	248	1,574	115
1956	99	9	15	16	31	25	34	45	77	281	1,698	120
1957	92	15	13	20	21	23	29	47	78	262	1,491	111
1958*	92	14	10	15	27	28	32	41	82	232	1,561	112
1959*	96	15	11	17	21	27	34	46	87	259	1,588	116
1960*	86	12	17	22	23	22	29	48	78	207	1,417	104
1961*	85	17	10	15	22	22	31	43	78	215	1,377	102
Females												
1901-10	68	27	6	4	4	10	26	64	132	389	1,657	143
1911-20	69	20	6	5	5	8	20	50	108	356	1,752	132
1921-30	73	13	4	4	4	5	10	31	85	318	1,845	117
1931-35	100	14	5	3	3	6	8	30	92	388	2,283	138
1936-40	136	18	6	4	5	6	12	34	123	476	2,714	167
1941-45	118	17	8	5	6	6	11	26	81	346	2,135	127
1946	110	15	4	3	5	6	6	11	59	260	2,037	110
1947	111	11	7	9	4	4	5	15	58	286	1,947	108
1948	100	11	4	4	4	3	4	18	51	231	1,726	94
1949	105	10	6	3	2	2	4	13	50	232	1,840	98
1950	113	8	2	2	1	3	5	14	45	230	1,994	103
1951	117	9	—	2	5	3	3	12	46	240	2,034	105
1952	105	9	2	2	5	2	5	11	44	218	1,743	92
1953	123	7	4	2	2	4	5	15	50	241	2,018	106
1954	141	6	3	3	1	3	5	13	45	295	2,249	118
1955	144	8	3	2	—	2	6	15	50	281	2,261	118
1956	149	8	3	2	4	2	5	13	50	275	2,338	120
1957	142	9	2	1	2	2	5	14	40	250	2,178	111
1958*	149	6	2	—	3	1	5	12	41	273	2,247	115
1959*	151	12	3	1	1	4	5	12	46	259	2,234	115
1960*	150	8	2	3	3	2	6	14	46	256	2,190	113
1961*	146	9	1	1	3	3	7	13	45	255	2,090	109

* According to the Seventh Revision of the International Classification (Nos. E900-E904). Other years according to the classification in use at the time.

† S.M.R.s. are based on civilian deaths and civilian populations for the years 1940-1949 inclusive.

Table CXIV. Accidental deaths: Deaths, infant mortality rates per 1,000 live births, and death rates per million living at all ages and ages over one year, by sex and age, 1961, England and Wales

Cause of death (and ICD No.)	Rate per million living (All ages)	Deaths										Total aged 15 and over
		All ages	0-	1-	5-	10-14	Total under 15	15-	25-	45-	65 and over	
Home accidents*: Coal gas poisoning (E890)	16 23	354 537	— 1	3 3	— 1	5 3	8 8	20 16	33 21	91 77	202 415	346 529
Other poisoning (E870-E888, E891-E895) ..	8	189	2 1	17 10	3 1	3 —	25 12	8 15	53 35	81 74	22 60	164 184
Falls (E900-E904)	53 122	1,184 2,901	13 5	21 15	3 2	2 —	39 22	5 3	35 20	147 131	958 2,725	1,145 2,879
Burns and scalds (E916, E917)	11 17	242 398	7 8	31 33	4 14	1 8	43 63	2 9	28 22	40 44	129 260	199 335
Choking and suffocation (E921, E922, E924, E925) ..	14 10	324 228	204 121	24 20	— 1	4 2	232 144	11 4	22 15	37 28	22 37	92 84
Other (Remainder of E870-E936) ..	8 6	188 141	17 21	38 15	15 2	18 1	88 39	17 6	26 11	30 29	27 56	100 102
Total home accidents (E870-E936)	111 185	2,481 4,401	243 157	134 96	25 21	33 14	435 288	63 53	197 124	426 383	1,360 3,553	2,046 4,113
Transport accidents: Motor vehicle road accidents involving injury to:—												
Motor cyclist† (E814, E815, E821) ..	62 5	1,382 125	— 2	2 —	2 2	1 1	7 3	793 70	342 34	199 18	41 —	1,375 122
Pedal cyclist (E813)	22 3	481 74	— —	4 5	20 2	83 9	107 16	65 13	63 12	142 25	104 8	374 58
Pedestrian (E812)	68 47	1,512 1,129	1 4	117 88	121 52	32 21	271 165	75 27	138 60	312 224	716 653	1,241 964
Occupant of motor vehicle (Remainder of E810-E825)	58 23	1,294 547	4 8	8 13	7 8	15 5	34 34	367 127	491 130	293 150	109 106	1,260 513
Other road accidents, involving injury to:—												
Pedal cyclist (E843)	3 0	71 11	— —	1 —	3 —	5 2	9 2	9 —	12 2	22 6	19 1	62 9
Pedestrian (E840-E842, E844) ..	7 1	19 13	— —	— 1	— 2	— —	— 3	— —	— 1	4 3	15 16	19 20

Table CXIV—continued

Cause of death (and ICD No.)	Rate per million living (All ages)	Deaths										Total aged 15 and over
		All ages	0—	1—	5—	10-14	Total under 15	15—	25—	45—	65 and over	
All other transport accidents:— including rail, air, motor vehicles (Remainder of E800-E866) {M F}	25 3	553 62	— —	10 3	11 4	17 3	38 10	97 12	164 14	200 14	54 12	515 52
Total transport accidents (E800-E866) {M F}	238 83	5,312 1,971	7 12	142 110	164 70	153 41	466 233	1,406 249	1,210 253	1,172 440	1,058 796	4,846 1,738
Other accidents:												
Poisonings (E870-E895) {M F}	6 3	124 78	— —	2 —	1 —	2 —	5 —	11 4	35 24	56 36	17 14	119 78
Falls (E900-E904) {M F}	32 25	705 586	2 1	8 4	15 2	17 2	42 9	52 4	126 10	186 44	299 519	663 577
Burns (E916, E917) {M F}	5 1	121 22	— —	— 1	1 1	5 1	6 3	12 8	51 4	46 1	6 6	115 19
Drowning (E929) {M F}	29 7	652 166	— 2	60 21	96 13	54 8	210 44	88 9	117 19	137 49	100 45	442 122
Other (Remainder of E870-E936) .. {M F}	41 5	923 116	28 17	19 7	23 2	29 4	99 30	151 14	304 6	300 23	69 43	824 86
Total other accidents (E870-E936) {M F}	113 41	2,525 968	30 20	89 33	136 18	107 15	362 86	314 39	633 63	725 153	491 627	2,163 882
Total all accidents (E800-E936) {M F}	462 308	10,318 7,340	280 189	365 229	325 109	293 70	1,263 607	1,783 341	2,040 440	2,323 976	2,909 4,976	9,055 6,733
All accidents (E800-E936) Infant mortality rate and death rate per million living .. {M F}	462 308		0.67 0.48	2.47 1.71	1.95 69	1.56 39	2.33 1.18	5.80 1.13	3.37 73	4.09 1.58	1.372 1.463	5.35 3.61

* Including deaths in residential institutions,

† Including passengers,

STILLBIRTHS

Data concerning stillbirths in England and Wales have been available since 1915, based on notifications to Medical Officers of Health (Notification of Births (Extension) Act, 1915). Total numbers, which were recognised as being incomplete, were published in the Annual Reports of the Chief Medical Officer to the Ministry of Health from its formation in 1919. Since July 1927, stillbirths have come within the registration system and data are more reliable. The Registrar General, in his annual *Review* for 1928, drew attention to the higher stillbirth rate in Wales and to the progressive decrease in the rate from North to South in England, which still prevails today. Some tendency for the rate generally to increase with urbanisation was also noted, although a low rate in London was an outstanding exception.

From 1918 until just before the war of 1939, the stillbirth rate (expressed as a proportion per thousand total live and stillbirths) showed no signs of decreasing, in marked contrast to the fall in infant mortality and maternal mortality which had been achieved. During the war years the stillbirth rate fell below the lowest levels of the inter-war period, and it has continued to decrease slowly since then (see Table 3 in Part I of this *Review*). Subsequent events have focused attention on stillbirths and factors influencing pre-natal development—the two atomic bombs dropped on Japan in 1945 with the heavy loss of foetal life; possible dangers to the human stock from radio-isotopes, from nuclear reactors and from bomb testing; postulated relations between medical irradiation of pregnant women and the origin of leukaemia or neoplastic disease in the unborn foetus; and in more recent years the tragedy of “thalidomide” babies having limb deformities resulting from the use of an apparently harmless drug during pregnancy.

Detailed information about the causes of stillbirth and routine surveillance of the frequency of their occurrence are therefore essential. Registration of the causes of stillbirth was first adopted within the United Kingdom by Scotland in 1939: it was introduced into England and Wales from 1st October 1960, by the operation of the Population (Statistics) Act, 1960. When an international comparison of causes of stillbirth in 1955 was carried out by the World Health Organization* eleven countries were able to furnish data: at least twenty countries publish such data now.

Definition of stillbirth

In England and Wales the statutory definition of a stillborn child for the purposes of registration is as follows:—

“still-born child means a child which has issued forth from its mother after the twenty-eighth week of pregnancy and which did not at any time after being completely expelled from its mother breathe or show any other signs of life”.

* WHO (1957) *Epidemiological and Vital Statistics Report*, vol. 10, p. 512.

The interpretation of this definition is believed to accord generally with the definition of “ foetal death ”* which was adopted by the third World Health Assembly in 1950, although “ a product of conception ” may occasionally not be considered to be a “ child ” and “ foetal death ” is not limited to any particular duration of pregnancy.

International comparison is impeded by lack of uniformity in stillbirth definitions. The World Health Assembly definition has not yet been universally applied and there are still differences in the practice of countries, especially in their choice of the qualifying period of gestation.

Number of stillbirths

During the year 1961 a total of 15,727 stillbirths occurred, giving a rate of 19·02 per thousand total births (i.e. live and stillbirths). Calculated upon the basis of live births only, the rate is 19·39 per thousand births.

The number of stillbirths in past years is given in Table B of Part II (Tables, Population) of this *Review*, distinguishing males and females for all stillbirths and also for illegitimate stillbirths. The annual wastage of births in this manner has declined from a yearly average of about 25,000 in the nineteen-thirties to just over 16,000 in the past decade: expressed as a rate to all births, the decline is more pronounced—from 41 per thousand in 1931 to 19 per thousand in 1961. Rates for each year since registration of stillbirths commenced in 1927 are shown in Table C of Part II of this *Review*, based upon population as well as upon total (live and still) births. The stillbirth rate to total births is also given for each quarter of the year for the past 16 years in Table D of Part II of this *Review*. The numbers of stillbirths for each county and the larger cities are published in the *Registrar General's Weekly Return* and current totals and rates are given in each *Quarterly Return*. Annual totals for the past year are given for counties and local authority areas in the *March Quarterly Return*.

Causes of stillbirth

The causes of stillbirth, as classified in the International Statistical Classification of Diseases (ICD), are set out in Table 23 A of Part I of this *Review* and fall into three main categories, whose contribution to the total number of stillbirths during 1961 were:

ICD No.	Cause	Stillbirths	Percentage
Y30-Y35	Disease in mother	4,657	30
Y36	Conditions of placenta and cord	4,061	26
Y37-Y39	Disease in infant	7,009	44

* “ Foetal death is death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy; the death is indicated by the fact that after such separation the foetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles.” (*International Classification of Diseases*, vol. 1, 1957, p. xxii.)

Among diseases in the mother the largest group is that of diseases and conditions of pregnancy and childbirth (8 per cent of all stillbirths), followed by difficulty in labour (8 per cent). Chronic disease in the mother is a smaller group (3 per cent): the remaining causes are much less important numerically—acute disease and accidents (under 1 per cent); and only one stillbirth was ascribed to toxic absorption from the mother.

The placental and cord conditions specified most frequently were premature separation of placenta (7 per cent), placental infarct (2 per cent) and placenta praevia (1 per cent). Cord conditions included prolapse of cord (2 per cent) and compression or obstruction of cord (1 per cent). More than one quarter of stillbirths in this group (27 per cent) are relegated to the final group of "Other abnormality" not specified in detail, and more than half of cord conditions (Y36·0) are similarly not separable in the classification.

The biggest single group of specified causes among diseases of the infant is that of all forms of congenital malformation (20 per cent of all stillbirths). Birth injuries (3 per cent) and haemolytic disease of the newborn (erythroblastosis) (5 per cent) are other identifiable groups.

Information about the cause of stillbirth does not extend in some cases beyond such unsatisfactory terms as maceration (6 per cent), asphyxia (2 per cent), prematurity (1 per cent), post-maturity (1 per cent) or atelectasis (1 per cent). No cause was specified in 5 per cent.

Since the registration of causes was not begun until October 1960, only a limited period of fifteen months is available for detecting any changes. A comparison has, however, been made of the final quarters of 1960 and 1961 (Table CXV). This takes account of possible and known seasonal fluctuations but as the 1960 information will reflect to some extent the initial difficulties of introducing the certification of stillbirth causes, the comparison should be treated with reserve.

In this comparison the numbers of stillbirths attributed to the ICD groups and the major sub-groups are set out for the months October-December of 1960 and 1961: the causes are also expressed as percentages of the total stillbirths.

There has been a marked fall in the percentage of stillbirths for which no cause could be attributed ("Unspecified causes", Y39·6), the proportion of all stillbirths in 1961, having fallen to nearly one-half of that in the last quarter of 1960. This is due largely to the inclusion of many stillbirths which, although registered in October, were certified before the operative date of the Population (Statistics) Act, 1960, and partly to the fact that the new form of stillbirth certificate was not in universal use at the beginning.

Increasing care and accuracy in the completion of the certificates, helped by the General Register Office's requests for fuller details of ill-defined causes, may be expected and this is probably reflected in the big increase in placental and cord conditions, which rose nearly 50 per cent. The conditions responsible for this increase are in the main "Premature separation of normally implanted placenta" (Y36·2) (more than three and a half times as many) and "Other abnormality of placenta and cord" (Y36·6) (increased by one-third). Neither of these changes throws much light on the aetiology of the processes leading to

Table CXV. Stillbirths by cause and percentage to all stillbirths for the December quarters of 1960 and 1961, England and Wales

ICD No.	Cause	Number of stillbirths in December quarter		Percentage of all stillbirths	
		1960	1961	1960	1961
Y30-Y39	All causes	3,743	4,015	100	100
	Diseases and conditions of mother				
Y30	Chronic disease	94	122	2.5	3.0
Y31	Acute disease	6	17	0.2	0.4
Y32	Diseases of pregnancy	810	707	21.6	17.6
Y33	Toxic substance	2	—	0.1	—
Y34	Difficulties in labour	259	326	6.9	8.1
Y35	Other causes in mother	21	15	0.6	0.4
Y36	Placental and cord conditions	730	1,090	19.5	27.1
	Diseases in infant				
Y37	Birth injury	97	96	2.6	2.4
Y38	Congenital malformations	710	777	19.0	19.4
Y39	Other	1,014	865	27.1	21.5
	Larger subdivisions of ICD groups				
Y32.2	Haemorrhage	290	117	7.7	2.9
Y32.3	Eclampsia	22	12	0.6	0.3
Y32.4	Toxaemia	490	558	13.1	13.9
Y34.2	Malposition	181	169	4.8	4.2
Y34.3	Abnormality of forces of labour	27	39	0.7	1.0
Y36.0	Cord	296	322	7.9	8.0
Y36.1	} Placenta praevia	47	51	1.3	1.3
Y36.3					
Y36.2	Separation of placenta	77	311	2.1	7.7
Y36.5	Placental infarct	99	111	2.6	2.8
Y36.6	Other	207	294	5.5	7.3
Y37.3	Malposition and birth injury	31	26	0.8	0.6
Y38.0	} Anencephalus	374	431	10.0	10.7
Y38.1					
Y38.20	} Hydrocephalus	196	219	5.2	5.5
Y38.2					
Y38.00	} Spina bifida	114	146	3.0	3.6
Y38.4					
Y38.4	Cardiovascular	20	7	0.5	0.2
Y38.5	Other	44	46	1.2	1.1
Y39.2	Erythroblastosis	173	193	4.6	4.8
Y39.3	Other foetal	13	22	0.3	0.5
Y39.4	Maceration	259	239	6.9	6.0
Y39.5	Ill-defined	235	225	6.3	5.6
Y39.50	Asphyxia	71	95	1.9	2.4
Y39.51	Atelectasis	27	25	0.7	0.6
Y39.52	Post-maturity	29	21	0.8	0.5
Y39.53	Prematurity	63	55	1.7	1.4
Y39.6	Unspecified	330	185	8.8	4.6
Rate per 1,000 total births—All causes		19.5	20.0		

stillbirth and they may be merely shifting further back in time responsibility for stillbirth for which no satisfactory explanation was known to the doctor or midwife.

The other group which shows a decrease over the course of twelve months is " Diseases and conditions of pregnancy and childbirth " (Y32) which fell by nearly one-fifth. The biggest fall was that of " Haemorrhage without mention of placental condition " (Y32·2) and since mention of placental conditions has increased, there seems to have been a transfer of cases from category Y32·2 to Y36. Since the two categories concerned are those in which the biggest differences are found when registrations from Scotland are compared with those from England and Wales, there seems to be a problem of interpretation and nomenclature which should be further investigated. A more moderate decline is in " Toxaemia with convulsions during pregnancy or labour (eclampsia) " (Y32·3) and as this can only be diagnosed on the evidence of objective manifestations, more reliance can be placed on this being a real decrease.

Other changes which merit attention are an increase in the small number of stillbirths due to " Acute disease in mother " (Y31), which doubled during the twelve months. This increase is due largely to influenza, which produced during each of the single months January, February and December, 1961, more stillbirths than in the whole last quarter of 1960. There were also moderate increases in chronic disease diagnosed in the mother, diabetes mellitus (Y30·2) showing an increase from 25 to 39 and chronic disease of the circulatory system (Y30·3) increasing from 42 to 63. In the absence of supporting evidence that these diseases have become so much more prevalent, or that mothers with these diseases have had more babies than usual, this increase can be regarded as a change in certification practice, indicating more careful searching for possible causes of stillbirth before completion of the certificate. Changes in the number of congenital malformations recorded as being responsible for stillbirth are slight.

Illegitimate births produce higher stillbirth rates than the average of all stillbirths (males 25·2, females 23·1) and the proportion of stillbirths with cause unspecified is also higher (7 per cent). The proportion of illegitimate stillbirths due to congenital malformations is 17 per cent compared with 20 per cent for legitimate births. Since some congenital malformations due to recessive genes appear more frequently if the parents are related, it would be valuable to know the relative incidence of consanguineous mating in these two categories.

Analysis of the causes of stillbirth

Factors which may be related to the occurrence of foetal death are classifiable as:

Characteristics of the mother.—Maternal age, legitimacy of the birth, number of previous live-born and stillborn children, illnesses, region of residence.

Characteristics of the pregnancy.—Time of year, multiple fecundation, nature of congenital malformations.

Characteristics of the delivery.—Place of delivery (i.e. at home, or in institutions of various types), geographical region of delivery, maturity of foetus, complications arising from placenta or cord.

Tables analysing the causes of stillbirths during 1961 appear in Part I of the *Registrar General Statistical Review* and provide information about some of these factors:

Table 23A	by age of mother
Table 23B	parity of mother
Table 23C	month of occurrence
Table 23D	geographical region and urban/rural aggregates
Table 23E	duration of pregnancy
Table 23F	birth-weight of child
Table 23G	place of confinement
Table 23H	for selected causes, by number of previous stillbirths and number of total births.

In addition stillbirths registered during the last quarter of 1960 are tabulated by cause and geographical region in Appendix C of Part I of this *Review*. Other analyses appear in this commentary volume and the following paragraphs examine in greater detail the factors influencing foetal death.

Characteristics of the mother

Maternal age.—The age of the mother has an important influence on the likelihood of the child being born dead. The best age for having a live child is between the years of 20–24. At this age the stillbirth rate is under 16 per 1,000 total births, but the rate is two and a half times as great (40 per 1,000) at ages 40 and over.

Conditions which reflect the age trend markedly are:

Rate per 1,000 total births

ICD No.	Cause	At age 20–24	At age 40 and over	Increase with age
Y30·3	Chronic circulatory disease	0·13	1·5	× 11
Y39·2	Haemolytic disease of newborn (Erythroblastosis)	0·45	1·8	× 4

Increasing maternal age is associated with increasing parity, and the increase in haemolytic disease of the newborn (erythroblastosis) appears to be due to increased parity rather than increased age. The percentage of stillbirths due to haemolytic disease of the newborn (erythroblastosis) is:

Maternal age	Parity			
	0	1	2	3 and over
Under 30	0·7	6·6	11·0	10·9
30 and over	0·5	4·0	7·2	7·8

The increase with maternal age in illegitimate stillbirths (1 per cent for mothers under 30 to 5 per cent for mothers aged 30 and over) is again probably due to parity: five-sixths of all men are rhesus positive, so that a previous pregnancy is likely to have resulted in some antibody formation.

An example of higher percentages occurring with increased age and also with lower parity is shown by toxæmia together with infection (Y32·3–Y32·5):

Maternal age	Parity		
	0	1–2	3 and over
Under 30	17·8	9·4	10·6
30 and over	19·8	15·6	12·9

Most other conditions show an increase with maternal age at about the average rate, but a few do not show so sharp a rise with age. In two groups (Y32·2, Y38·0) this rise with age is probably due to increasing parity of the mother:

Rate per 1000 total births

ICD No.	Cause	At age 20–24	At age 40 and over	Increase with age
Y32·2	Haemorrhage without mention of placental condition	0·51	0·78	×1·5
Y34·3	Difficult labour with abnormality of forces of labour	0·16	0·37	×2·3
Y38·0	Anencephalus	2·1	2·5	×1·2
Y38·1–Y38·7	Other congenital malformations	1·6	2·8	×1·8

The proportion males/females (M/F) for total births declines and approaches unity with increasing maternal age, but for stillbirths alone it rises and diverges more from unity. It is thus seen that males suffer disproportionately more as the risks due to maternal age rise:

Males/Females (M/F) proportion according to maternal age

	Maternal age					
	Under 20	20–	25–	30–	35–	40 and over
For total births (T.B.)	1·067	1·064	1·060	1·063	1·055	1·055
For stillbirths (S.B.)	1·035	1·015	1·048	1·074	1·072	1·149
S.B./T.B. separate ratios as per cent.	97	95	99	101	102	109
Stillbirth rate per 1,000 total births	17·1	15·6	16·5	20·3	29·5	39·8

Below the maternal age of 30, males are stillborn proportionately less than females; but above that age the proportion increases. This effect is due in great measure to stillbirths from anencephalus which affects females more, and is of greater relative importance in young mothers.

Parity of mother.—Only legitimate births are analysed for parity of mother.

Parity in this context means the total number of previous children (of all marriages) whether live-born or stillborn. The stillbirth rate is lowest for women who had borne one previous pregnancy to at least 28 weeks gestation, see Table 23B of Part I of this *Review*. The rate rises from 13 per 1,000 total births for these mothers to 27 per 1,000 in those having borne 4 infants previously and to 40 in those having borne 8 or more previously; it is also raised (20 per thousand) for first births.

The proportion of male to female stillbirths is also lowest when the stillbirth rate is lowest, i.e. for 1-parous mothers. It rises to a maximum for 4-parous mothers and then declines for the next few pregnancies.

Most of the listed causes of stillbirth follow this same pattern; a fall after the first child and then an increase with increasing parity, and at about the same rate. Haemolytic disease of the new born (erythroblastosis) shows a very low rate per thousand for infants of primiparous mothers (0·15), and the increase is much steeper, from 0·74 for 1-parous to 2·04 for the 4-parous and 4·13 for the 8 or more parous. This progressive increase is understandable from the nature of the disease, depending upon sensitization of rhesus negative mothers with successive pregnancies.

Congenital malformations as a whole do not show so great a dependence upon parity:

Stillbirth rate per 1,000 total births

ICD No.	Cause	Parity of mother		
		1-parous	4-parous	8 or more parous
Y38·1	Hydrocephalus	0·52	1·2	0·79
Y38·2 and Y38·00	Spina bifida (alone and combined) ..	0·49	0·82	1·1

The higher stillbirth rate for primiparous mothers is of interest. For stillbirths from all causes the ratio is 52 per cent higher than at the most favourable parity; and the discrepancy is greater for maternal conditions (6·51/3·53) than for placental and cord conditions (4·86/3·45) or for diseases of the infant (8·77/6·20).

The effect of age and parity appear to act in opposite senses if the proportion of all stillbirths is used:

Y32·2 Haemorrhage without mention of placental condition
Percentage of all causes for each parity

Age	Parity			
	0	1	2	3 and over
Under 30	2·8	3·5	4·8	4·6
30 and over	2·0	3·3	3·3	3·8

Using the same method anencephalus becomes of less importance with increasing parity and increasing age:

Y38·0 Anencephalus
Percentage of all causes for each parity

Age	Parity			
	0	1	2	3 and over
Under 30	13·7	13·9	10·6	8·8
30 and over	6·8	9·0	9·0	7·8

The apparent lower incidence at older ages may be partly fallacious, as other conditions (maternal disease and difficulty in labour) are more common at older ages, and especially in women of low parity:

Proportion of male/female stillbirths according to parity of mother

	Number of previous born children										
	0	1	2	3	4	5	6	7	8	9	10 and over
M/F ratio in 1961	1·08	0·97	0·99	1·05	1·17	1·10	1·09	1·03	0·93	1·11	1·32

The excess of male over female stillbirths, as shown by the male/female proportion, is higher for first births than for the next few successive births. One possible explanation is that, since on average male infants are heavier at birth, injuries resulting from severer mechanical difficulties at the first delivery might cause this excess. The fact that the stillbirth rate for all causes is 52 per cent higher at first births compared with second, whereas the rate for stillbirths caused by birth injury is 133 per cent higher, lends support to this possibility.

Stillbirths in previous pregnancies (i.e. live or still births).—Table 23H of Part I of this *Review* is restricted to legitimate births, and gives for a few selected groups of causes the distribution of stillbirths against the total number of previous live or still births. For all legitimate babies born in 1961, the proportion born dead was 18·7 per thousand. For those mothers with at least one previous birth the proportion of children by previous pregnancies who were born dead was slightly higher, i.e. 20·7 per thousand. If the results are considered according to the total number of previous births, whether live or dead, and including children born in all previous marriages, there is a slight increase in the stillbirth rate with the increasing number of children born, compatible with the higher levels of the stillbirth rate prevailing in past years to which these past births correspond:

Legitimate stillbirth rate in previous births per 1,000

	Parity					
	1	2	3	4	5-9	10 and over
All women with at least one previous birth	18·5	22·2	22·3	23·7	23·4	33·4
Women with at least one previous stillbirth	70·2	79·5	73·2	69·1	71·8	83·1

If now the group of women who gave birth to dead children is considered, the stillbirth rate for their previous pregnancies is considerably higher, being 73·3 per thousand total births for the whole group, with a slight increase with increasing number of children born.

The stillbirth rate in previous pregnancies (i.e. live or still births) varies considerably according to the cause of the latest stillbirth, being highest for women whose last stillbirth was due to chronic or acute disease in the mother (133 per thousand total previous births) or haemolytic disease of the newborn (erythroblastosis) (124), and low for difficult labour and birth injury (combined stillbirth rate 39). Within some major groups the rate differs between various members of the sub-groups; for example among diseases and conditions of pregnancy and childbirth (ICD No. Y32) the previous stillbirth rate when the most recent stillbirth was due to haemorrhage was only 64, but 104 if the last was due to toxæmia or infection. There were similar differences among the women whose last stillbirth had been attributed to congenital malformation: if this was anencephalus (ICD No. Y38·0) the previous stillbirth rate was fairly high (70) but for all other malformations it was much lower (45-49) (see Table CXVI).

Further light is thrown on the mechanism of these differences by considering changes in the stillbirth rate in previous pregnancies, according to the number of such pregnancies. For erythroblastosis (ICD No. Y39·2) the rate jumps steeply from 34 per thousand total previous births for those having only one previous maternity to over 140 for all subsequent maternities. No other condition shows so marked a rise with increasing numbers of deliveries except haemorrhage (ICD No. Y32·2), where the rate rises from 47 to 180.

Table CXVI. Stillbirths in previous legitimate pregnancies (live or still births) of women who bore a dead child in 1961, England and Wales

ICD No.	Cause	Num-ber	Parity						
			1	2	3	4	5-9	10 and over	Pooled
			<i>Rate per 1000 total previous births</i>						
	All causes	8,853	70·2	79·5	73·2	69·1	71·8	83·1	73·3
Y30, 31	Chronic and acute disease in mother ..	294	216	89	111	78	118	100	132·9
Y32·2	Haemorrhage ..	338	47	87	56	33	80	180	64·2
Y32·3-5	Toxaemias and infection	1,082	120	105	84	114	76	71	103·9
Y34, 37	Difficulties in labour and birth injury ..	911	26	49	45	31	54	14	39·3
Y36	Placental and cord conditions	2,418	75	67	64	60	56	87	67·0
Y38·0	Anencephalus ..	874	67	67	89	61	69	—	70·0
Y38·1-3	Hydrocephalus, spina bifida and other malformation of C.N.S.	573	46	53	54	40	51	100	49·0
Y38·4-7	Other malformations	191	49	31	67	39	45	—	44·6
Y39·2	Erythroblastosis ..	677	34	145	143	181	174	171	123·9

N.B. Pooled value is weighted average using the number of mothers in each group, not the number of pregnancies.

A rising rate with increasing number of previous maternities indicates increased hazards to the foetus with increasing parity. For disease of the mother (ICD Nos. Y30, Y31) the rate falls after one previous maternity, and a tendency to fall is also noted for the group of toxæmia, eclampsia and infection (ICD Nos. Y32·3-Y32·5).

The above table refers only to mothers who had a legitimate stillbirth in their 1961 pregnancy, and at least one previous birth.

For all legitimate births in 1961 with at least one previous birth the stillbirth rates in previous pregnancies were:

Number	1	2	3	4	5-9	10 and over	Pooled
495,564	18·5	22·2	22·3	23·7	23·4	33·4	20·7

Characteristics of the pregnancy

Multiple births.—For all multiple births in 1961 the stillbirth rate (46·8 per thousand total multiple births) was more than twice the rate for single births. Table DD in Part II of this *Review* provides data of all multiple maternities; data for single births are obtained by subtraction:

Stillbirth rate 1961

	Males	Females	Both sexes
Single child	18.2	18.6	18.3
Twin births	52.5	39.9	46.3
Triplets	102.4	73.2	88.0
All multiple births ..	53.1	40.3	46.8
All births	19.0	19.1	19.0

The percentage of stillbirths occurring in twins of all stillbirths is 6 per cent and in triplets less than 1 per cent. The highest proportion of twin births is found in stillbirths due to difficulty in labour (ICD No. Y34) 19 per cent, and especially with disproportion (ICD No. Y34.1) 62 per cent.

Knowing the sex of the other child in the same pregnancy, the combinations of sexes recorded are:

	Twins			Triplets		
	M/M	F/F	M/F	M/M/M	F/F/F	Mixed
Legitimate births ..	359	251	214	7	5	8
Illegitimate births ..	30	20	12	—	—	1
All births	389	271	226	7	5	9

Starting from the basis that twins of unlike sex are obviously dizygotic, i.e. have arisen from two sperm cells, it can be assumed that an equal number of similarly sexed twins will also have the same origin, leaving 434 stillborn twins (886-452) which arose from monozygotic conceptions. This process can be applied to stillbirths from particular causes:

ICD No.	Cause	Sex composition of twin pairs			Ratio of mono- to dizygous twins	
		M/M	F/F	M/F		
	All causes	389	271	226	434/452	0.96
Y32	Diseases and conditions of pregnancy and childbirth ..	62	50	37	75/74	1.01
Y34	Difficulty in labour	104	77	61	120/122	0.98
Y36	Placental and cord conditions ..	97	74	54	117/108	1.08
Y38	Congenital malformations ..	39	32	25	46/50	0.92
Y39	Diseases of foetus	63	30	38	55/76	0.72

Stillborn infants from triplet and quadruplet pregnancies are too few for any conclusion. One occurred among illegitimate stillbirths, but none occurred among the 3,077 stillbirths due to congenital malformations.

Seasonal fluctuations.—The number of infants born varies considerably from month to month, reflecting peak periods of marriage and the operation of other social factors. The number of stillbirths follows these fluctuations, as well as being influenced by other causes which produce death of the foetus. Table D

in Part II of this *Review* gives quarterly rates of stillbirths to total births for the past 16 years. The difference between quarters is statistically highly significant and the mean values for each quarter expressed as a percentage of that for the whole year are:

<i>Jan.-Mar.</i>	<i>Apr.-June</i>	<i>July-Sept.</i>	<i>Oct.-Dec.</i>
102·8	98·7	97·3	101·1

The number of stillbirths in each month of 1961 are presented in Table 23C of Part I of this *Review*, but allowance has to be made (i) for the varying length of month and (ii) for the number of total births. As a first adjustment the recorded stillbirth figures have been multiplied by the ratio which one-twelfth the annual number of total births bears to the actual number of total births registered during the month under review. A more precise comparison would need to take account of differences in duration of pregnancy as between live-births and stillbirths, a difference which in turn depends upon the cause of the stillbirth.

Figures adjusted by the simple ratio outlined above and rounded to the nearest whole number are given below for each month of 1961 for stillbirths from all causes and also for those causes which have been thought to show seasonal fluctuations:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Mean
Adjusted number of stillbirths due to:	1,401	1,298	1,280	1,237	1,285	1,255	1,240	1,317	1,283	1,302	1,361	1,477	1,311
Anencephalus	156	144	121	125	136	138	117	148	144	131	138	175	139
*Spina bifida	61	54	47	59	51	44	31	45	44	47	56	48	49
Acute maternal disease..	15	16	4	4	—	2	5	2	3	2	2	13	6
Chronic maternal disease	44	34	37	25	40	23	40	41	38	42	34	50	37

* Includes anencephalus with mention of spina bifida.

Acute disease in the mother shows an indubitable seasonal swing, and this is ascribable largely to influenza.

Seasonal fluctuations have been reported previously in the proportion of congenital malformations. Data from Scotland and Manchester, as well as the present figures, agree in showing a low proportion in the third quarter of the year and a high level around January for both anencephalus and spina bifida.

Characteristics of the delivery

Geographical differences.—Differences of great interest are revealed by the analysis according to area of residence given in Table 23D of Part I of this *Review*, both in the distribution by regions and by density of population aggregates.

Urban/rural contrasts show that the highest stillbirth rates for all causes occur in towns with between 50,000 to 100,000 inhabitants; as size of community increases the proportion falls, and it also falls as more rural conditions predominate. This can be exemplified by expressing the stillbirth rate for each aggregate of areas as a percentage of the average for England and Wales:

Conurbations	98
Urban areas with populations of 100,000 and over	103
Urban areas with populations of 50,000 and under 100,000 ..	105
Urban areas with populations of under 50,000	102
Rural areas	97

The rates for geographical regions can also be expressed in the same way, as percentages of the average stillbirth rate; set out in semi-diagrammatic array they are:

		Northern	114		
	North	East and			
	Western	West Ridings	106		
Wales	118	N. Midland	103		
		Midland	105	Eastern	90
	South			London and	
	Western	Southern	85	South Eastern	87

Individual causes follow this general pattern for the most part, but there are a few exceptions, which may prove to be of medical importance. Rural areas have the lowest overall stillbirth rates with the exception of maternal conditions such as:

Diabetes mellitus—125 per cent of average rate
(based on 28 cases)

Eclampsia and other toxæmia—112 per cent of average rate.

Exceptions to the relatively low rates in conurbations occur with:

Separation of normal placenta—115 per cent of average rate

Asphyxia—128 per cent of average rate.

Some of the main causes for which the regions with the highest stillbirth rate fare worst, compared with the average for England and Wales, are set out below:

Cause	Rates as percentage of average for England and Wales		
	Wales	Northern Region	North Western Region
	Per cent	Per cent	Per cent
Eclampsia and toxæmia	128	115	98
Difficult labour with malposition	154	142	88
Placenta prævia	167	162	90
	(20 cases)	(26 cases)	(29 cases)
Congenital malformation of foetus:			
Anencephalus	137	129	134
Hydrocephalus	123	128	128
Spina bifida (without anencephalus)	175	124	119
Erythroblastosis	106	139	114
Maceration	130	110	117
All causes	118	114	111

There is reasonable concordance between these data, although they are based on small numbers; this suggests that the excesses found in these regions with high stillbirth rates may have a common explanation. If this is so, and the cause can be discovered and rectified, there is hope of reduction of the stillbirth rates to the levels found in the south and east.

Place of confinement.—Data are given in Table 23G of Part I of this *Review*. Disease of the mother, abnormalities during pregnancy and difficulties at the time of delivery are all likely to lead to the admission of the mother to hospital for her confinement. As a result, hospitals undertaking specialist maternity care would be expected to show a higher proportion of stillbirths, through selection of patients with greatest risk of stillbirth. Confinement at home, on the other hand, will show a low stillbirth rate since only good-risk patients will be allowed to deliver at home. Deliveries occurring sooner than expected, for which this factor of selection has had no time to operate, should show an intermediate risk. This is in fact so.

The stillbirth rate for infants delivered in N.H.S. hospitals is almost three times as great as that for deliveries at home. Variations from this ratio of 3:1 reflect the success with which abnormalities can be forecast, and the mother brought into hospital for delivery. Among maternal diseases and conditions thought to be the cause of stillbirth this ratio is higher in:

Y30·2	Diabetes mellitus	..	..	..	..	19·5 : 1
Y30·3	Circulatory disease	..	..	..	..	5·5 : 1
Y32·2	Haemorrhage	..	..	..	..	5·9 : 1
Y32·4	Toxaemia (excluding eclampsia)	..	..	..	..	6·9 : 1

The ratio falls markedly when abnormality reported as the cause of stillbirth cannot be so readily forecast:

Y34	Difficulty in labour	..	..	..	..	1·8 : 1
Y34·2	Malposition	..	..	..	..	1·7 : 1
Y34·3	Abnormal forces	..	..	..	..	1·1 : 1

Placental and cord conditions show a similar range. Placenta praevia almost invariably leads to admission to hospital (ratio 18·1 : 1) and haemorrhage with separation of the normal placenta also has a high ratio (6·5 : 1). Placental infarct, however, shows very little selective action (ratio 1·5 : 1) and is presumably diagnosed mainly after the event.

The proportion of all legitimate stillbirths which were delivered at home was 15 per cent for England and Wales. Deviations from this proportion were noted:

Higher proportion—	Tyneside conurbation	..	..	20 per cent
	West Midlands conurbation	..	..	18 per cent
	Towns with under 50,000 population	..	..	16 per cent
Lower proportion—	Greater London conurbation	..	..	9 per cent

The disparity is greatest for first maternities (3 per cent Greater London to 12 per cent Tyneside) than for those with 1-2 previous births (Greater London 11 per cent to West Midland 29 per cent) or those with 3 or more (14 per cent West Yorkshire conurbation to 24 per cent for towns with population of 100,000 or more).

Conurbations, and London in particular, should be able to deal more expeditiously with emergencies such as haemorrhage or difficult labour and threatened danger to the child; fewer of these should be delivered outside N.H.S. hospitals. The percentage of stillbirths found to be delivered not in N.H.S. hospitals is:

	ICD No. Y32·2 Haemorrhage	ICD Nos. Y34, Y37 Difficult labour, Birth injury
	Per cent	Per cent
Greater London	(5)	18
Other conurbations	11	19
All conurbations	9	19
Towns, 100,000 and over	(12)	27
Towns, 50-100,000	(11)	26
Towns, under 50,000	8	24
Rural areas	(13)	23

Rates enclosed within brackets are calculated on less than ten deaths.

The interpretation of this hospital/home ratio for stillbirths due to foetal conditions is more complex. Birth injuries often result from abnormal conditions causing admission to hospital and so a marked disparity is to be expected. Congenital malformations will only affect the ratio if the abnormality can be diagnosed before birth, or by producing some detectable feature such as malposition or hydramnios, or if it is associated with other diseases of pregnancy:

Anencephalus	4·6 : 1
Hydrocephalus	1·3 : 1
Spina bifida	4·1 : 1

The selection factor does not appear to apply in the case of mothers with acute disease, usually acute infectious disease. This was specified as the cause of stillbirth in 1 per cent of stillbirths delivered at home, but in only 0·3 per cent of those born in N.H.S. hospitals.

Areas with the lowest stillbirth rates per thousand births have fewer stillbirths delivered at home for the following causes in particular:

Area	ICD No.	Cause	Number of stillbirths	
			Actual	Expectation
Greater London	Y34, Y37	Difficult labour and birth injury ..	31	46·1
	Y36	Placental and cord conditions ..	48	85·9
	Y32·3-5	Toxaemia and infection	8	24·2
	Y34, Y37	Difficult labour and birth injury ..	11	17·0

In addition to delivery at home or in N.H.S. hospitals some stillbirths occurred in "Other hospitals" (mainly maternity homes) and "Elsewhere" (which includes various types of institutions as well as varied unpremeditated locations and vehicles). The proportion of legitimate stillbirths falling in these last two categories together, varies in different parts of England and Wales:

Greater London conurbation	..	..	3 per cent
Other conurbations	..	..	1 per cent
Urban areas outside conurbations	..		2 per cent
Rural areas	..	..	5 per cent

The areas in which the stillbirth rates per thousand births are low are all areas with above the average proportion of stillbirths in "Other hospitals" and "Elsewhere", i.e. nursing homes, maternity hospitals, institutions. Based on all stillbirths (whether legitimate or not) the proportion of stillbirths falling into these two categories is:

Greater London conurbation	..	..	4 per cent
Rest of South-east region	..	..	3 per cent
Eastern region	..	..	4 per cent
Southern region	..	..	7 per cent

compared with an average for England and Wales of 3 per cent (legitimate stillbirths 3 per cent, illegitimate 6 per cent).

Duration of pregnancy.—In a small proportion of cases (7 per cent) the duration of pregnancy is not recorded. For those in which it is recorded the duration with the highest number of stillbirths is the 40th week (24 per cent), 10 per cent are born later, or post-maturely, and the remaining 66 per cent were born prematurely. Table CXVII showing premature stillbirths classified into those born during the 7th, 8th and 9th lunar months respectively has been prepared from Table 23E of Part I of this *Review* and shows each cause as a percentage of stillbirths from all causes in the gestation group concerned.

The causes of stillbirth whose relative frequency is highest in the earlier months of pregnancy includes:

Y30	Chronic disease in mother.
Y32	Diseases and conditions of pregnancy.
Y36·1	Placenta praevia.
Y36·2	Premature separation of placenta.
Y38·0	Anencephalus.
Y39·4	Maceration, cause not specified.
Y39·53	Prematurity.

In some of these conditions the downward trend is not established until after the 8th month (Y32 and Y38·0). The relationship is obvious in the case of prematurity. For the other conditions it may be due in part to changes in total numbers.

Table CXVII. Selected causes of stillbirth as a percentage of all causes, by duration of pregnancy, 1961, England and Wales

ICD No.	Cause	Total	Duration of pregnancy (weeks)					Not stated
			28-	32-	36-	40	41 and over	
Y30	Chronic disease in mother	3	5	4	3	2	1	3
Y32	Diseases and conditions of pregnancy and childbirth	18	23	24	19	11	9	17
Y32·2	Haemorrhage without mention of placental condition	3	7	4	3	2	1	3
Y32·4	Other toxæmias of pregnancy	14	15	19	16	9	8	12
Y34	Difficulties in labour	8	6	4	6	13	13	7
Y34·1	Difficult labour with disproportion of pelvis	2	3	1	1	2	3	2
Y34·2	Difficult labour with malposition of foetus	5	2	3	4	8	6	4
Y34·3	Difficult labour with abnormality of forces of labour	1	0	0	1	2	2	1
Y36	Placental and cord conditions	26	22	21	26	30	33	25
Y36·1	Placenta prævia	1	3	2	1	1	0	1
Y36·2	Premature separation of normally implanted placenta	7	9	9	8	5	3	7
Y36·5	Placental infarct	2	2	2	2	2	5	1
Y37	Birth injury	3	1	1	2	5	6	3
Y38	Congenital malformation of foetus	20	18	25	21	18	12	18
Y38·0	Anencephalus	11	12	17	12	5	4	10
Y38·1	Hydrocephalus	4	2	2	4	5	3	4
Y38·2	Spina bifida	3	1	2	2	4	3	2
Y39	Diseases of foetus, and ill-defined causes	22	25	20	22	22	25	27
Y39·2	Erythroblastosis	5	5	6	7	3	1	5
Y39·4	Maceration, cause not specified	6	8	7	7	5	4	5
Y39·50	Asphyxia	2	1	1	1	3	6	2
Y39·52	Post-maturity	1	—	—	0	1	6	1
Y39·53	Prematurity	1	6	2	1	0	0	2
Y39·6	Cause unspecified	5	4	3	5	6	4	10
	All causes	100	100	100	100	100	100	100

(Derived from Table 23E, Part I, of this *Review*)

There is a much smaller number of conditions whose relative importance increases as the duration of gestation increases:

- Y34 Difficulties in labour.
- Y36 Placental and cord conditions.
- Y37 Birth injury.
- Y38·1 Hydrocephalus.
- Y38·2 Spina bifida.
- Y39·50 Asphyxia.
- Y39·52 Post-maturity.

In some cases the trend is not established until the 8th month (Y34, Y36, Y37) and it may not always be shown after the 40th week (Y34, Y38·1, Y38·2). For post-maturity the relationship is obvious; for birth injury, difficulties in labour, hydrocephalus and asphyxia also, the result is understandable in view of the increased size of the foetus with the passage of time; whilst placental damage is likely to be cumulative and so become more prominent in the later stages of pregnancy.

The largest percentage of unspecified causes occurs in stillbirths born in the 40th week: if it is conceded that stillbirths attributed to prematurity and post-maturity are also "unspecified" as to cause, then the total percentages unspecified become:

	Week of gestation						All
	28-	32-	36-	40	41 and over	Not stated	
Per cent unspecified ..	10	5	5	7	10	13	7

Birth weight.—Birth weight of stillborn infants is collected and is analysed in Table 23F of Part I of this *Review*, but birth weight of live born children is not collected by the General Register Office. It is, however, known from other sources that the average weight of all male live births is about $7\frac{1}{2}$ lbs. and of all female live births about $7\frac{1}{4}$ lbs., in each case the standard deviation of the observations being slightly less than $1\frac{1}{4}$ lbs. There are differences between the average weights of single and multiple births, and between children born in hospital and those born elsewhere*.

In the discussion which follows, reference is made to the birth weight groups in Table 23F by the lower limit of the weight, e.g. the " $6\frac{1}{2}$ lb. group" refers to the group whose weight is $6\frac{1}{2}$ lbs. and over but less than $7\frac{1}{2}$ lbs. When the average weight is quoted, this is the exact weight. The exact weight of all infants in the $6\frac{1}{2}$ lbs. group is assumed to be 7.0 lbs.; no information is available about the precision with which weighing was carried out, or the method of rounding off the observed weight, and so no adjustment is made for these matters.

For stillbirths from all causes the weight at birth is about 2 lbs. lower than for all births. The average weight for boys is 5.4 lbs. and for girls 4.9 lbs. with a standard deviation (s.d.) in both cases of 2.3 lbs. (Birth weight is unknown in 19 per cent of all stillbirths.)

There are wide variations in the average weight for individual causes of stillbirth. The groups which have relatively heavy stillborn babies are:

- Y30.2 Diabetes mellitus—average 6.5 lbs.
- Y34.4 Difficulties in labour with operative delivery—average 7.4 lbs.
- Y39.52 Post-maturity—average 8.0 lbs.

Birth weights which are not quite so high, but still above the average for all stillbirths are found in the following conditions:

- Y34 Difficulties in labour (excepting Y34.4)—average 6.3 lbs.
- Y36 Cord conditions—average 5.5 lbs.
- Y37 Birth injuries (also duration effect)—average 6.9 lbs.
- Y38.2 Spina bifida—average 5.8 lbs.
- Y39 Disease of foetus (excepting Y39.53 and Y39.54)—average 5.4 lbs.

* Gibson, J. R. and McKeown, T. (1952) *Brit. J. Soc. Med.*, 6, 152.

Birth weights below the average for all stillbirths occur in the following conditions:

Y36·1	Placenta praevia—average 4·6 lbs.
Y38·0	Anencephalus—average 3·5 lbs.
Y38·5	Other malformations—average 4·7 lbs.
Y39·4	Maceration, cause not specified—average 4·5 lbs.
Y39·53	Prematurity (= duration effect)—average 3·3 lbs.

The low birth weight of stillbirths attributed to prematurity is understandable; such a statement of the “ cause ” of stillbirth is unenlightening. Maceration too, indicating death of the foetus at some considerable time before delivery, would understandably be associated with early delivery; these may be in part cases of missed abortion, and so may explain the association which has been noted between haemorrhage in early pregnancy and increased stillbirth rate. Congenital malformations owe their low birth weight partly to the higher proportion of females, but this cannot explain completely why the large numbers should be in the lower birth weights. Abnormalities in pregnancy such as hydramnios may also precipitate the early onset of delivery.

The average birth weight (Table 23F of Part I of this *Review*) varies with the season, deviation from the overall average of 5·14 lbs. being:

	<i>Jan.—Mar.</i>	<i>Apr.—June</i>	<i>July—Sept.</i>	<i>Oct.—Dec.</i>
(in lbs.)	+0·053	—0·007	—0·023	—0·025

Rather greater variability is shown by the birth weight of stillborn infants due to certain maternal diseases (ICD Nos. Y30, Y31 and Y32·2–Y32·5) whose average birth weights are greater during the earlier winter months:

	<i>Jan.—Mar.</i>	<i>Apr.—June</i>	<i>July—Sept.</i>	<i>Oct.—Dec.</i>
(in lbs.)	+0·02	—0·16	+0·04	+0·08

MALIGNANT NEOPLASMS OF THE GENITAL ORGANS ACCORDING TO MARITAL CONDITION

In the *Registrar General's Statistical Review of England and Wales*, Part III, for 1959, the Registrar General examined the mortality for that year according to the marital status of the deceased and found that for many causes of death the mortality for single and widowed persons was higher than for married persons of the same age.

The reasons for this difference may be considered under several headings:

Statistical inaccuracy. A death rate is the ratio of the number of deaths divided by the population in a certain selected group of people. If there is a tendency for individuals to be enumerated within one group when alive but to be included within another group when they die, this upsets the ratio. It is possible that, while persons may state that they are married on a census return when they are not, there may be less social pressure on an informant providing information for a death certificate to conceal the true marital status of the deceased. Hence the apparent death rate for married persons may be decreased due to an artificial increase in the related population, although such evidence as was gathered at the 1951 Census (*General Report* page 44) indicates that discrepancy in marital status is not a serious source of error. Moreover, this factor would affect all causes of death equally and any differences in S.M.Rs. that exist between the various causes of death continue to suggest a true association between mortality and marital status.

Selection of the fit for marriage. People in poor health, suffering possibly from a chronic disease, are less likely to become married than persons in good health; consequently married persons have a better chance of survival than single by this differential selection.

Selection of the unfit for widowhood. Widows or widowers will have shared the difficulties consequent upon the death of their partners. This may lead to infection, economic deprivation or psychological instability of the survivor and the risk of early death. Hence it is not surprising respiratory tuberculosis, iron deficiency anaemias and suicide are especially high amongst the widowed.

The protection of marriage. The marital state may be more beneficial in preserving the life of those who are married because the married person will take more care of himself or of his spouse than would a single or widowed person.

The risks of marriage. Marriage itself may have some increased effect on the risk of survival. Naturally the mortality of women from causes of death attributed to delivery and pregnancy (ICD Nos. 640-689) and other diseases of the female genital tract (ICD Nos. 620-637) was much higher amongst the married and widowed than amongst the single. But there was an increasing contrast amongst the neoplasms of the genital tract. In single women deaths due to cancer of the corpus uteri were comparatively high, whereas deaths due to cancer of the cervix uteri were comparatively low. In males, deaths due to cancer of prostate were low in single men whereas those due to cancer of testis were high in the single and widowed.

Table CXVIII. Malignant neoplasms of the genital organs, Standardised Mortality Ratios, 1959, England and Wales

(All causes at ages 15 and over = 100)

ICD No.	Cause of death	Single	Married	Widowed
	<i>Females</i>			
171	Cervix uteri	39	101	127
172	Corpus uteri	139	89	99
175	Ovary and Fallopian tubes ..	140	92	96
	<i>Males</i>			
177	Prostate	69	97	117
178	Testis	116	91	158

In view of the possibility of these Standardised Mortality Ratios concealing some interesting divergences of mortality rates at different ages, the causes of death have been tabulated over a five year period 1957-1961 by age, sex and marital state, and age specific rates for each matrimonial state have been calculated.

Cancer of cervix uteri

In the case of deaths assigned to cancer of the cervix uteri the death rate for married women is about double that for the single women at ages between 25 and 64 and at 65 and over the rate for married women is $2\frac{1}{2}$ times as great.

It is interesting to note that for widows, however, the rate is very much higher, especially amongst the younger widows at ages under 45 who suffer a death rate of twice their married sisters. It is not at all apparent why, if the marital state predisposes towards cancer of the cervix, the early death of the husband should increase this risk two-fold.

The ages at which the risk of death from cancer of the cervix exceeds 1 in 10,000 are approximately 30 for widows, 40 for married women and 60 for single women and these ages may be of use in suggesting limits below which it would be unprofitable to undertake extensive population examinations for the detection of early cancers of the cervix.

Cancer of corpus uteri

At ages over 45 single women have higher mortality rates than married or widowed women.

The contrast with cancer of the cervix is complete; almost twice as many single women die of cancer of the body of the uterus compared with the cervix whereas amongst women ever married more than twice as many die of cancer of the cervix. Except at the younger ages where the deaths are small, there is no great difference between the widowed and married women. This suggests that the crucial point is the fact that a woman has been married, but the continuation of the marriage is not. Possibly this may be an effect of child-bearing. Unfortunately it has not been possible at this stage to continue this analysis further to determine whether parous women have a lower mortality from cancer of the corpus uteri than non-parous women.

Table CXIX. Deaths from malignant neoplasms and death rates per million living by marital condition and age, 1957-1961, England and Wales

(A) Cervix uteri (ICD No. 171)

Age	Single			Married			Widowed and divorced			All conditions		
	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year
0-14	5,069	4	0.16	—	—	—	—	—	—	5,069	4	0.16
15-24	1,985	1	0.10	899	5	1.11	3	—	—	2,887	6	0.42
25-34	386	19	9.84	2,525	271	21.5	30	17	113.3	2,941	307	20.9
35-44	309	73	47.2	2,768	1,384	100.0	118	118	200.0	3,195	1,575	98.6
45-54	407	167	82.1	2,622	2,268	173.0	266	341	256.4	3,295	2,776	168.5
55-64	399	208	104.3	1,857	1,945	209.5	570	901	316.1	2,826	3,054	216.1
65-74	309	186	120.4	879	1,300	295.8	864	1,441	333.6	2,052	2,927	285.3
75+	192	124	129.2	239	412	344.8	806	1,649	409.2	1,237	2,185	353.3
All ages	9,056	782	17.3	11,789	7,585	128.7	2,657	4,467	336.2	23,502	12,834	109.2

Diagram 11 (A)

Cervix uteri

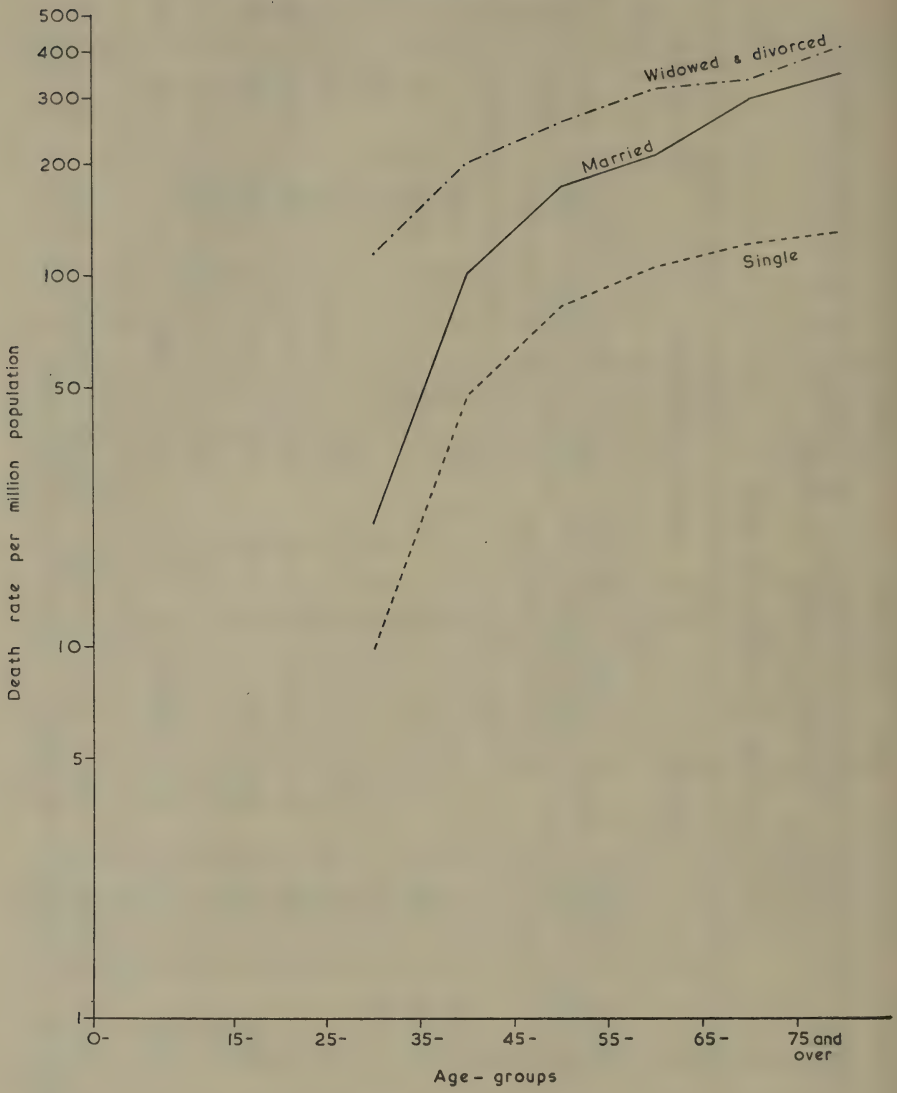


Table CXIX—continued

(B) Corpus uteri (ICD No. 172)

Age	Single			Married			Widowed and divorced			All conditions		
	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million per population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million per population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million per population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million per population per year
0-14	5,069	2	0·08	—	—	—	—	—	—	5,069	2	0·08
15-24	1,985	2	0·20	899	1	0·22	3	—	—	2,887	3	0·21
25-34	386	6	3·11	2,525	11	0·87	30	1	6·67	2,941	18	1·22
35-44	309	15	9·71	2,768	96	6·94	118	9	15·3	3,195	120	7·51
45-54	407	140	68·8	2,622	501	38·2	266	65	48·9	3,295	706	42·9
55-64	399	383	192·0	1,857	1,079	116·2	570	371	130·2	2,826	1,833	129·7
65-74	309	349	225·9	879	779	177·2	864	785	181·7	2,052	1,913	186·5
75+	192	292	304·2	239	244	204·2	806	978	242·7	1,237	1,514	244·8
All ages	9,056	1,189	26·3	11,789	2,711	46·0	2,657	2,209	166·3	23,502	6,109	52·0

Diagram 11 (B)

Corpus uteri

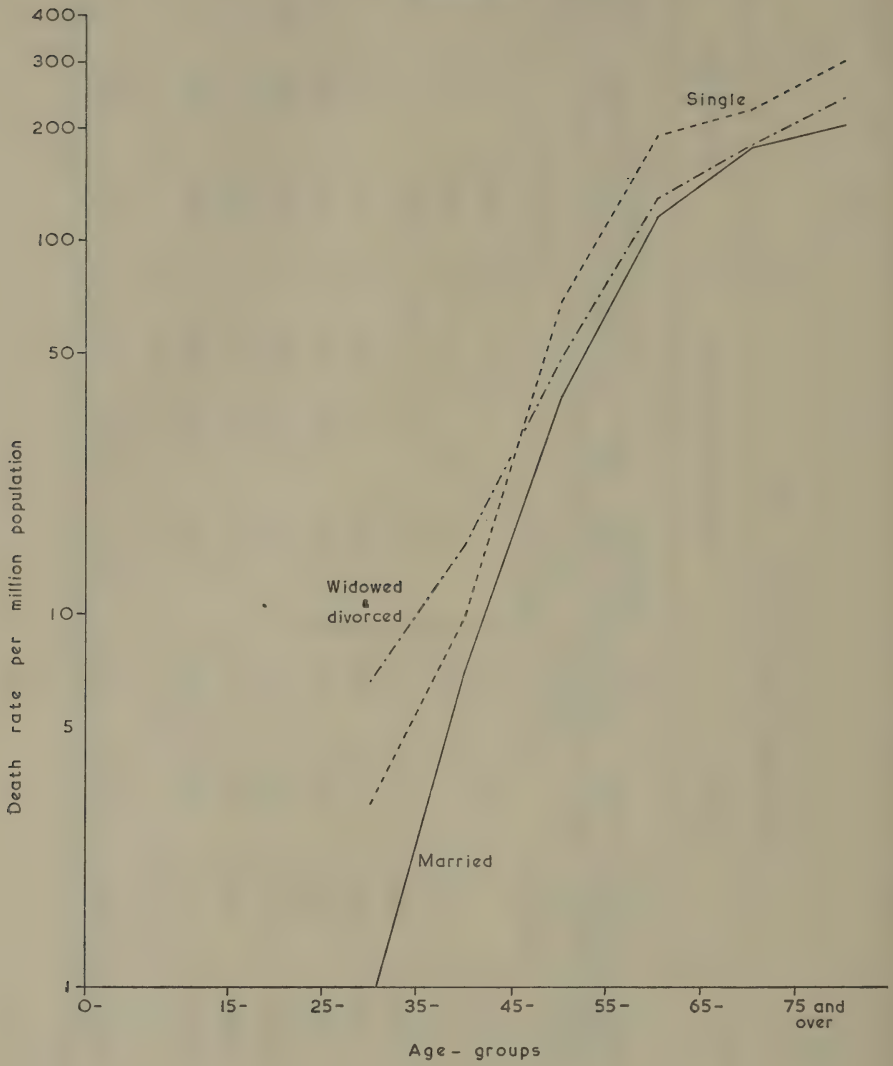


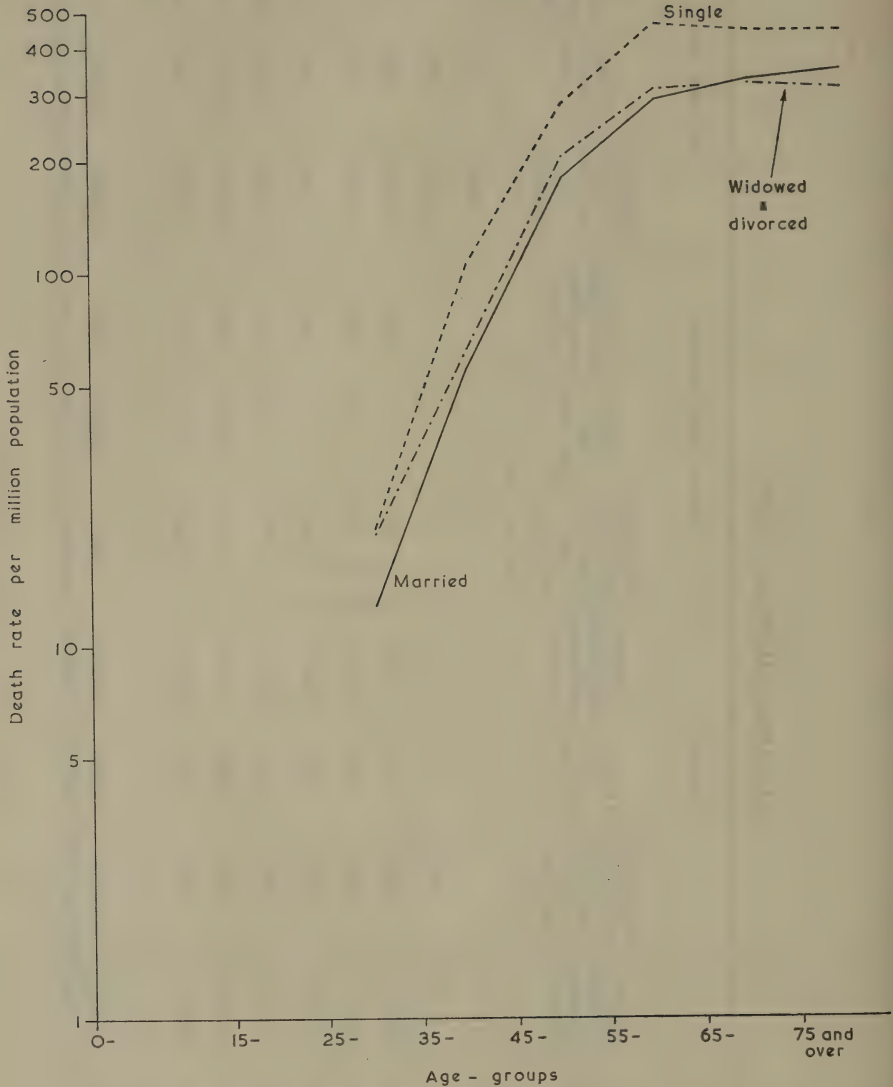
Table CXIX—continued

(C) Ovary (ICD No. 175.0)

Age	Single			Married			Widowed and divorced			All conditions		
	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year
0-14	5,069	22	0.87	—	—	—	—	—	—	5,069	22	0.87
15-24	1,985	46	4.63	899	14	3.11	3	—	—	2,887	60	4.16
25-34	386	40	20.7	2,525	162	12.8	30	3	20.0	2,941	205	13.9
35-44	309	164	106.1	2,768	764	55.2	118	37	62.7	3,195	965	60.4
45-54	407	576	283.0	2,622	2,360	180.0	266	272	204.5	3,295	3,208	194.7
55-64	399	928	465.2	1,857	2,703	291.1	570	886	310.9	2,826	4,517	319.7
65-74	309	692	447.9	879	1,446	329.0	864	1,385	320.6	2,052	3,523	343.4
75 +	192	426	443.8	239	418	349.8	806	1,261	312.9	1,237	2,105	340.3
All ages	9,056	2,894	63.9	11,789	7,867	133.5	2,657	3,844	289.3	23,502	14,605	124.3

Diagram 11 (C)

Ovary

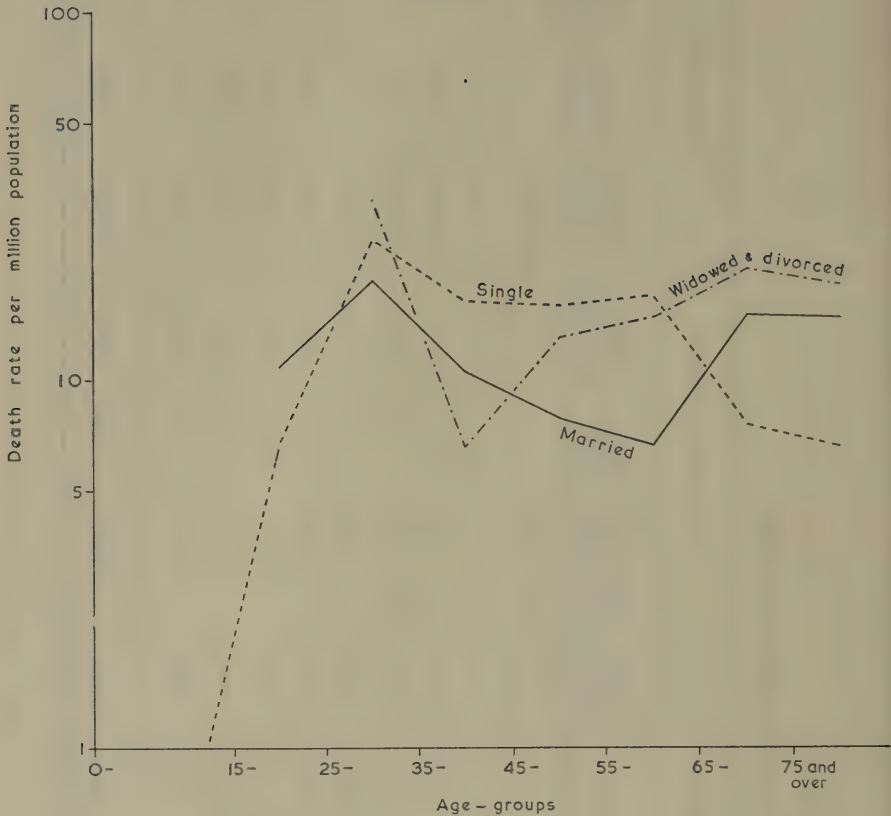


Cancer of the ovary

The death rates from cancer of the ovary are higher at each age amongst single women than they are amongst married and widowed women. There is no significant difference between the widowed and the married women. Unlike cancers of the uterus, which appear to increase throughout life, the cancers of the ovary appear to reach a plateau about the age of 55 and although the risk of death from neoplasia does not decline after the menopause, at least it does not continue to increase.

(D) Testis (ICD No. 178)

Age	Single			Married			Widowed and divorced			All conditions		
	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million per population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million per population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million per population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million per population per year
0-14	5,319	9	0.34	—	—	—	—	—	—	5,319	9	0.34
15-24	2,489	85	6.83	482	26	10.8	2	—	—	2,973	111	7.47
25-34	710	86	24.2	2,231	207	18.6	26	4	30.8	2,967	297	20.0
35-44	341	28	16.4	2,705	143	10.6	61	2	6.56	3,107	173	11.1
45-54	277	22	15.9	2,805	110	7.84	92	6	13.0	3,174	138	8.70
55-64	179	15	16.8	2,053	68	6.62	150	11	14.2	2,382	94	7.89
65-74	106	4	7.55	1,084	81	14.9	211	21	19.9	1,401	106	15.1
75+	61	2	6.56	355	26	14.6	263	24	18.2	679	52	15.3
All ages	9,482	251	5.29	11,715	661	11.3	805	68	16.9	22,002	980	8.91

Diagram 11 (D)**Testis****Cancer of the testis**

It is unfortunate that cancer of the testis (ICD No. 178) includes at least two separate diseases; the seminoma and the teratoma which have different aetiology and age distribution. Men suffering from teratomata or embryomata are usually younger than those suffering from seminomata.

The death rates from testicular tumours for all men are bimodal in age distribution. There is a peak at about 30 and another at 70, but for the single men there is a sharp peak about 30 and a slow decline thereafter. In the case of the married and widowed men they have fewer deaths at the early ages, remain relatively free during middle age but they suffer a considerable increase in risk in the seventh decade. It seems probable that these two peaks correspond to the two pathological entities of teratoma and seminoma. The death rate from teratomata is probably maximal at 30 and is higher amongst single men, whereas the later peak is caused by the increase in seminomata and is more predominantly a phenomenon of the married men.

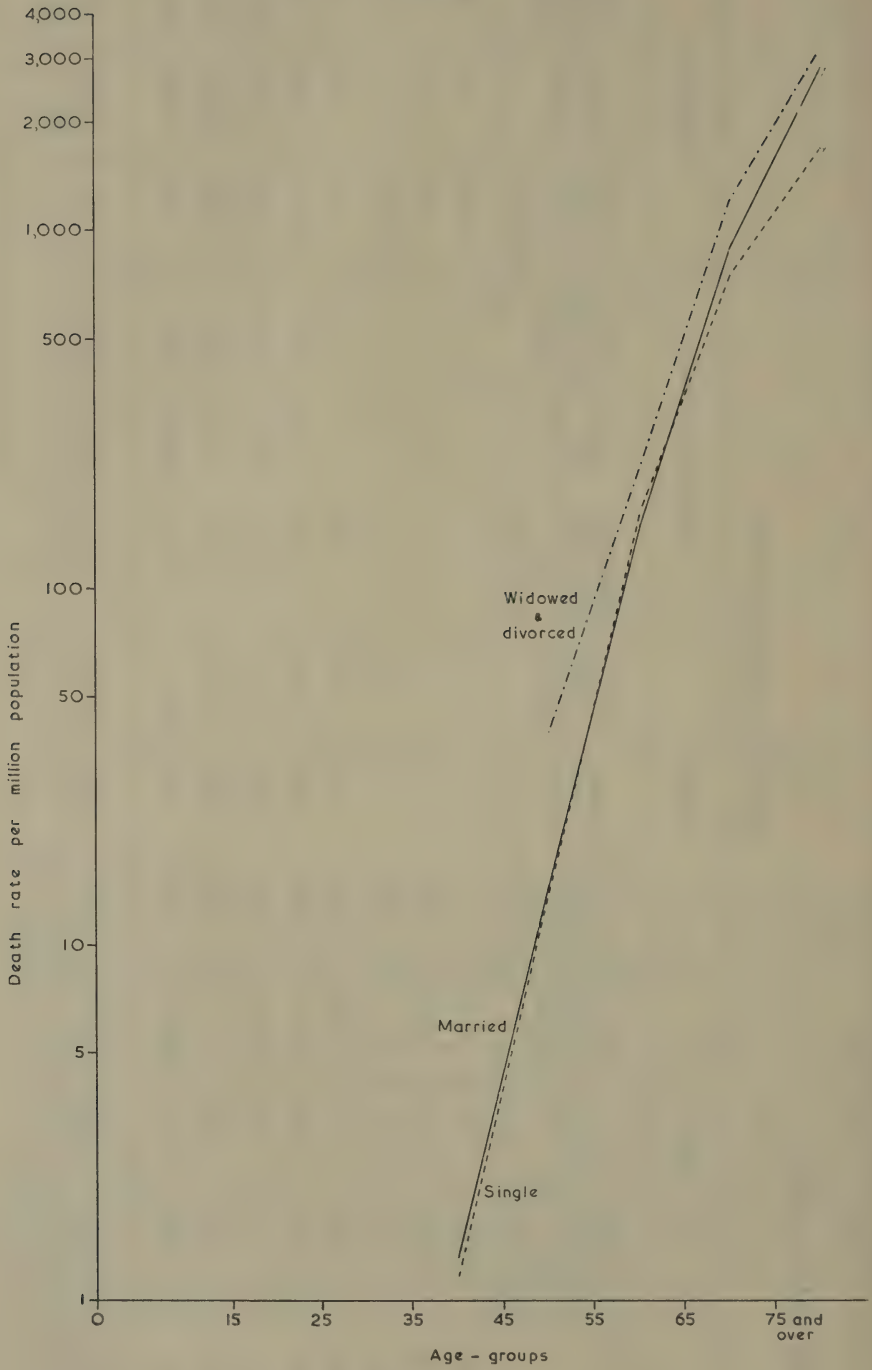
Table CXIX—continued

(E) Prostate (ICD No. 177)

Age	Single			Married			Widowed and divorced			All conditions		
	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year	Population as at 30th June 1959 (in thousands)	Deaths for 1957-1961	Deaths per million population per year
0-14	5,319	10	0·38	—	—	—	—	—	—	5,319	10	0·38
15-24	2,489	3	0·24	482	—	—	2	—	—	2,973	3	0·20
25-34	710	—	—	2,231	1	0·09	26	—	—	2,967	1	0·07
35-44	341	2	1·17	2,705	18	1·33	61	—	—	3,107	20	1·29
45-54	277	20	14·4	2,805	204	14·5	92	18	39·1	3,174	242	15·2
55-64	179	141	157·5	2,053	1,508	146·9	150	162	216·0	2,382	1,811	152·1
65-74	106	390	735·8	1,084	4,725	871·8	211	1,236	1,172	1,401	6,351	906·6
75+	61	503	1,649	355	4,944	2,785	263	4,107	3,123	679	9,554	2,814
All ages	9,482	1,069	22·5	11,715	11,400	194·6	805	5,523	1,372	22,002	17,992	163·5

Diagram 11 (E)

Prostate



Cancer of the prostate

Cancer of the prostate is essentially a disease of advanced age; it is of negligible proportions before the age of 45 yet becomes an important cause of death over the age of 75, and unlike most other genital neoplasms the rate continues to rise steeply with advancing age.

There is little effect of marital state on the death rate. At all ages under 75 there are no significant differences between the married and the single men although the widowed men have a consistently higher rate. At ages over 75 there is a large difference between the single man and the others in that the single men have only half the cases that would be expected from the general experience. Single men who survive to age 75 are obviously a highly selected group but it is not at all clear why they should have this relative freedom from cancer of the prostate.

CARDIOVASCULAR DISEASES

One of the most striking features of the past decade has been the great interest taken by both the medical press and the lay press in the rising death rate from coronary artery disease. There is no doubt that the number of deaths allocated to the category "Arteriosclerotic heart disease, including coronary disease" has risen spectacularly. Whereas in 1947 the *Registrar General's Statistical Review* could report "arteriosclerotic heart disease, a term not much used in England" (p. 201, Part III), today it is almost a household word.

Yet in spite of this, the total number of deaths from heart disease has not increased, if allowance is made for the increase in population, especially the increase in the number of elderly persons, in whom the bulk of these cardiovascular diseases occur. The S.M.Rs. (Standardised Mortality Ratios, based on the years 1950-52 as 100) for the past eleven years are given in Table 9 of Part I. In 1961 the S.M.R. for all diseases of the circulatory system was 98 for males and only 88 for females. Certain forms of disease have increased but others have decreased, the biggest decrease being in other myocardial degeneration whose S.M.R. is now 52 for males and 56 for females. What has happened to this vague amorphous group of myocardial degenerations? There have been no major therapeutic advances or methods of prevention which would explain their disappearance; but there have been substantial diagnostic advances and widespread dissemination of new conceptions which could alter the terminology used by doctors certifying the cause of cardiovascular deaths.

All men are mortal. Cardiovascular disease forms a large part of this mortality in older persons—mortality which can only be postponed, not eliminated. In the following discussion attention is directed more to cardiovascular disease in younger persons: at these ages improvements resulting from more effective therapy can be measured more clearly and a watch can be made for any changes in the pattern of disease.

Infants

With very few exceptions all cardiovascular deaths in infancy are attributed to congenital malformations. These have averaged 1,269 annually over the past seven years, rising from 1,075 in 1955 to 1,428 in 1961, an average annual increase of 4 per cent*. During this period births have been increasing at the rate of 3 per cent annually, and it is possible that there has been a slight increase in these deaths, even allowing for the greater number of births. Expressed as a rate per thousand births (in the same year) the deaths from congenital malformations were:

* Data for each year 1955 to 1961 are given in Table CXXI. A linear trend has been fitted to the series and this, expressed as a percentage of the mean value during the period, is the average annual increase quoted.

Year	1955	1956	1957	1958	1959	1960	1961
Rate	1·61	1·69	1·77	1·69	1·75	1·73	1·76
M/F ratio	1·50	1·34	1·31	1·38	1·24	1·22	1·25

The excess of males, shown by the male to female (M/F) ratio, has fallen during this period; the increase in deaths has been disproportionately greater for female infants (6 per cent more annually) than for male infants (3 per cent more annually).

The average numbers of deaths ascribed to other cardiovascular causes during the past seven years have been:

ICD No.	Cause	Annual average	M/F ratio
330	Subarachnoid haemorrhage	12	2·8
331	Cerebral haemorrhage	5	1·2
332	Cerebral embolism and thrombosis	4	1·9
228	Haemangioma and lymphangioma	7	1·4

Deaths due to ill-defined and unknown causes (ICD No. 795) have tended to decrease slightly and average 24 annually.

Children of pre-school age

In this age-group (1 year old but under 5) congenital malformations are still the most important cause of death from cardiovascular disorders, but the number of deaths is much smaller. The average deaths annually was 147 for the seven years 1955–1961, increasing by 2·9 annually: this increase is not much in excess of the rise in population (1·6 per cent annually). By contrast with the sex ratio in children under 1 year old, the M/F ratio is almost unity, i.e. 1·06.

Other cardiovascular deaths seen in infants are also infrequent, the annual average being:

ICD No.	Cause	Annual average
330	Subarachnoid haemorrhage	4
331	Cerebral haemorrhage	2
332	Cerebral embolism and thrombosis	2
334	Other vascular lesions of C.N.S.	2
228	Haemangioma and lymphangioma	2

Deaths from ill-defined and unknown causes (ICD No. 795) are on an average slightly less than two annually.

Children of school age and young persons

In the age-group 5–19 years congenital malformations are becoming less prominent as the outstanding cause of death from cardiovascular diseases but still remain the largest group.

There has been a definite increase in the number of deaths attributed to congenital malformations, the numbers having increased from 156 in 1955 to 240 in 1961, an average annual increase of over 9 per cent, compared with the population increase of only 1 per cent:

Year	1955	1956	1957	1958	1959	1960	1961
Death rate per million . .	1·64	1·56	1·72	1·75	2·04	2·37	2·37
M/F ratio	1·11	1·34	1·23	1·22	1·30	1·15	1·26

The average M/F ratio (1·23) is close to that now found for younger children. Cerebrovascular accidents are still next in importance:

ICD No.	Cause	Annual average	M/F ratio
330	Subarachnoid haemorrhage	53	1·65
331	Cerebral haemorrhage	11	0·74

Rheumatic fever and damage to the heart take third place in this age-group:

ICD No.	Cause	Annual average	M/F ratio
401	Acute rheumatism	34	0·91
410	Mitral valve	32	1·21
411	Aortic valve (rheumatic)	5	4·67
414	Other rheumatic endocarditis	6	1·73
416	Other rheumatic heart disease	10	1·15

Deaths from acute rheumatism have declined steadily at an average annual rate of 19 per cent. The decline for all rheumatic heart conditions has averaged 21 per cent but has been irregular in the past three years.

Other conditions beginning to emerge are:

ICD No.	Cause	Annual average	M/F ratio
422	Other myocardial degeneration	9	2·00
430	Acute and subacute endocarditis	11	0·83
431	Acute myocarditis	6	1·73
434	Other diseases of heart	14	1·20
456	Other diseases of arteries	10	0·59

but they are still uncommon disorders in a population group of 9,808,400 persons (average population 5-19 age group).

Young adults

This age-group (20 years old but under 35) is the first in which congenital malformations yield their position as the most important cause of cardiovascular death, their place being taken by rheumatic conditions:

ICD No.	Cause	Annual average	M/F ratio
401	Acute rheumatic heart disease	19	1.0
410	Mitral valve	285	0.6
411	Aortic valve (rheumatic)	25	3.6
414	Other rheumatic endocarditis	34	1.0
416	Other rheumatic heart disease	58	1.0

All these show declining numbers of deaths, 26 per cent annually for acute rheumatic heart disease, 14 per cent for endocarditis, 12 per cent for mitral valve disease, 3 per cent for aortic valve disease, but insignificant for others in ICD No. 416. Both sexes have shared fairly equally in the decline.

The second most important cause of death in this group is coronary artery disease (ICD No. 420.1). The deaths attributed to this cause have risen during the past seven years by nearly 2 per cent annually of their average number, whereas the population in this age group has decreased by 0.7 per cent. The death rates per million population for each sex have been:

Year	1955	1956	1957	1958	1959	1960	1961
Males	33	37	37	41	42	44	41
Females	5.5	8.2	5.7	4.8	8.0	4.6	5.1

The average annual number for males is 173 and for females 26; only male deaths show a clear increase.

Cerebrovascular accidents are now in third place:

ICD No.	Cause	Annual average	M/F ratio
330	Subarachnoid haemorrhage	179	1.1
331	Cerebral haemorrhage	70	1.2
332	Cerebral embolism and thrombosis	14	1.0

and congenital malformations have fallen to fourth in order of numerical importance with an average of 117 annually (M/F ratio 1.1).

The middle aged

This group between 35-55 years old has been isolated from that of older persons as widespread degenerative changes are still rare at this age. In this group of 12.7 million persons, coronary artery disease (ICD No. 420.1) is the

outstanding cardiovascular cause to which death is attributed with an average of 8,300 deaths each year, and the number has increased at the rate of 3·7 per cent annually compared with a population increase of only 0·1 per cent annually. The death rate per million for each sex during the seven years has been:

Year	1955	1956	1957	1958	1959	1960	1961
Males	1,010	1,063	1,083	1,163	1,158	1,237	1,260
Females	172	165	165	189	183	193	198

As in the younger adult age-group, there is a distinction between the clear and marked increased death rate among males and the smaller increase in females.

Deaths ascribable to other possibly related forms of this disease condition are by comparison completely insignificant:

ICD No.	Cause	Annual average	M/F ratio
420·0	Arteriosclerotic heart disease	11	3·6
420·2	Angina pectoris without coronary artery disease	22	6·0

Deaths attributed to angina pectoris are declining at an average rate of 22 per cent annually.

Cerebrovascular accidents are the next most numerous group, but subarachnoid haemorrhage is no longer the most important member of the group:

ICD No.	Cause	Annual average	M/F ratio
330	Subarachnoid haemorrhage	1,031	0·76
331	Cerebral haemorrhage	2,164	0·92
332	Cerebral embolism and thrombosis	616	1·2
334	Other vascular lesions of C.N.S.	63	1·1

This group as a whole has been declining at the rate of 1 per cent per annum for males, but more rapidly for females—a decline of over 3 per cent per annum. Subarachnoid haemorrhage, however, does not fit in with this general trend, and deaths ascribed to ICD No. 330 have increased annually for males by 0·8 per cent annually, but for females by 2·3 per cent annually.

Rheumatic disease of the heart is the third most important cause of death:

ICD No.	Cause	Annual average	M/F ratio
410	Mitral valve	1,688	0·52
411	Aortic valve (rheumatic)	150	3·1
414	Other rheumatic endocarditis	151	0·62
415	Other rheumatic myocarditis	36	0·85
401	Acute rheumatic heart disease	24	1·1
416	Other rheumatic heart disease	333	0·70

All these categories, with the exception of aortic valve disease, have shown definite changes during the past ten years—a decline in the number of deaths attributed to acute disease (20 per cent less annually), myocarditis (12 per cent less annually), other endocarditis (8 per cent less annually), and mitral valve disease (5 per cent less annually), but an increase in the number of deaths attributed to ICD No. 416, other rheumatic heart disease (4 per cent more annually). As a result of more sophisticated methods of diagnosis there has probably been a transfer from some other categories to this last one, but the net result has been a decrease of 82 deaths annually on an average, equal to 3·4 per cent fewer deaths for the whole rheumatic group.

Other heart diseases recorded may be enumerated briefly, with an indication of the average annual changes:

ICD No.	Cause	Annual average	Annual average change	M/F ratio
421	Non-rheumatic endocarditis:			
·0	Mitral valve	7	N.S.	1·5
·1	Aortic valve	228	2·2	4·1
·2—4	Others	77	—4·3	0·93
422	Other myocardial degeneration	442	—61·8	1·2
430	Acute endocarditis	105	—4·5	1·9
431	Acute myocarditis	28	2·1	1·4

(N.S. indicates no significant change)

Diseases of the vessels accounted for the following average numbers of deaths:

ICD No.	Cause	Annual average	Annual average change	M/F ratio
463	Phlebitis of legs	56	—2·8	0·81
465	Pulmonary embolism	131	2·4	0·93
466	Other venous embolism and thrombosis	106	7·3	0·88

Ill-defined causes (ICD No. 795) accounted for an average of 19 deaths annually in this age-group.

The elderly

In this group aged 55 years and older, the general death rate is rising sharply with increasing age and degenerative changes may appear in many organs and tissues of the body. Allocation of death to one cause only is therefore subject to greater possibilities of individual interpretation; for this and other reasons, too great an emphasis on deaths in these older persons is unwise, although numerically they form the great bulk of cardiovascular deaths.

The largest single cause of death is ICD No. 420·1 “Heart disease specified as involving coronary arteries”, accounting for an average of 72,765 deaths annually during the seven years. There are more deaths of males than of females in the ratio 1·46 to 1, although the number of females at risk is 37 per cent greater than the number of males; and the number is rising steadily year

by year for males at the rate of 4·8 per cent more annually and for females 6·0 per cent more annually. These rates are considerably in excess of the rate of increase of the population at risk, which is 1·7 per cent annually for males and 1·6 per cent for females.

Other categories in the "Arteriosclerotic heart disease including coronary disease" group are relatively unimportant:

ICD No.	Cause	Annual average	M/F ratio
420·0	Arteriosclerotic heart disease so described		
	1955-1957	614	0·99
	1958-1961	1,102	0·79
420·2	Angina pectoris without mention of coronary disease		
	1955-1957	545	1·18
	1958-1961	356	1·16

The Seventh (1955) Revision, a minor revision of the International Classification of Diseases, came into force in 1958; the effect of this was to bring more clearly to attention the allocation to this category of deaths in which general arteriosclerosis was mentioned as a cause. If trends are fitted separately to the years before and after this discontinuity, deaths attributed to arteriosclerotic heart disease (ICD No. 420·0) have increased at the rate of 13 per cent annually, and deaths from angina pectoris have decreased at the rate of 13-14 per cent annually.

There has also been an increase in the number of deaths attributed to coronary artery disease as a result of the revision; after allowing for any trends present, the transfer of deaths from one category to another in the elderly can be estimated as in the following table:

ICD No.	Cause	Changes	Difference between 6th and 7th Revision
420·1	Coronary artery disease	Now includes those conditions with mention of functional disease of heart	68,000 to 69,000 (+1½ per cent)
433	Functional disease of heart	Now includes those conditions with mention of myocardial degeneration or arteriosclerosis but excludes them with mention of coronary disease or hypertension	2,400 to 5,200 (+117 per cent)
445	Malignant hypertension	Now includes those conditions with mention of cerebral vascular lesions, and nephritis. Also includes conditions in ICD No. 446 if described as malignant	210 to 440 (+110 per cent)
447	Other hypertensive disease with no heart disease	Now excludes hypertension with arteriosclerosis	1,700 to 4 (-100 per cent)
451	Aortic aneurysm (non-syphilitic)	Now includes aneurysm of abdominal aorta unless specified as syphilitic	1,500 to 1,900 (+27 per cent)

These estimates are consonant with the comparability factors for all ages given in the text volume 1957 and based on a dual coding of deaths registered in the second half of 1957.

It will be seen that apparently minor changes in coding directions have led to the virtual extinction of one category (ICD No. 447) and to gross changes in some of the other categories. Whether the changes give a clearer insight into the disease processes causing death seems problematic.

One interesting phenomenon is the rise and fall of angina pectoris. One hundred years ago (1861) it accounted for 106 male deaths in this age-group, more than twice as many as were ascribed to syncope, i.e. deaths which now would presumably be attributed to coronary thrombosis. For a number of years deaths from angina pectoris were not published as a separate entity, but on their re-emergence in 1939 they had risen to 1,600 deaths, being about one sixth of deaths ascribed to coronary artery disease. Since then they have faded away and now are only one tenth as numerous as in 1939, and are only 1/300 the number ascribed to disease of the coronary arteries.

To what extent this change is real, or dependent on coding procedures or the diagnoses used by certifiers is a difficult point to decide. Even in 1939 only angina pectoris "without mention of coronary disease (*sic*)" was tabulated; and certifiers are requested in the "Notes and Suggestions" accompanying books of blank medical certificates to state whether any coronary disease was present. There is no doubt that the picture of deaths recorded reflects what it is desired to have recorded, as much as what has actually happened.

In 1861 the largest single cardiovascular cause of death was heart disease not otherwise distinguished; and today the group of other myocardial degenerations (ICD No. 422) is still the second most numerous category in the elderly averaging 53,700 for the seven year period but decreasing by more than 3,000 annually (about 6 per cent).

Cerebral vascular lesions affecting the central nervous system account for over 71,000 deaths each year:

ICD No.	Cause	Annual average	M/F ratio
330	Subarachnoid haemorrhage	1,934	0.50
331	Cerebral haemorrhage	27,302	0.67
332	Cerebral embolism or thrombosis	35,739	0.71
334	Other cerebral vascular accidents	6,050	0.76

The relative importance of these four categories is gradually changing. "Haemorrhage" is declining at the rate of 1.6 per cent annually, and the other three categories are increasing at the rates of 3 per cent (ICD No. 330), 1.6 per cent (ICD No. 332) and 6 per cent (ICD No. 334) respectively. For cerebral embolism or thrombosis the increase is confined almost entirely to women.

Another large group which is decreasing in numbers is that of other myocardial degeneration (ICD No. 422) to which 64,000 deaths were attributed in 1955 but which has fallen at a rate of 3,000 deaths annually. Although deaths with any mention of functional disease of the heart have been excluded from 1958 onwards, the change does not appear to have affected this category to any appreciable extent.

Rheumatic heart disease is of small numerical importance in this age-group, but does show changes of interest:

ICD No.	Cause	Annual average	M/F ratio	Annual trend
410	Mitral valve disease	3,444	0·44	— 86 (— 2 per cent)
411	Aortic valve (rheumatic) ..	325	1·4	+ 14 (+ 4 per cent)
414	Endocarditis	319	0·59	— 24 (— 8 per cent)
415	Myocarditis	137	0·55	— 15 (— 11 per cent)
416	Other rheumatic heart disease ..	634	0·50	+ 30 (+ 5 per cent)

The traditional forms of rheumatic heart disease appear to be declining, but other forms are being diagnosed as rheumatic instead. Endocarditis not specified as rheumatic (ICD No. 421) shows the reverse tendency:

ICD No.	Cause	Annual average	M/F ratio	Annual trend
421·0	Non-rheumatic mitral valve disease	247	0·49	+ 36 (+ 14 per cent)
421·1	Aortic valve disease	1,864	1·22	+ 79 (+ 4 per cent)
421·4	Other	653	0·65	— 58 (— 9 per cent)

There may thus be complex shifting of diagnostic conceptions.

Functional heart disease (ICD No. 433), already mentioned as a category which increased as a result of the Seventh Revision of the Classification, averaged 2,500 deaths annually before that date and over 5,000 deaths subsequently, with no clear cut trend. The sex ratio M/F remained virtually unchanged being 0·61 before and 0·59 afterwards.

Other diseases of the heart (ICD No. 434) averaged 6,608 deaths annually and increased at the rate of 500 ($7\frac{1}{2}$ per cent) each year:

ICD No.	Cause	Annual average	M/F ratio	Annual trend
434·0	Kyphoscoliotic heart disease	52	0·52	6 per cent
·1	Congestive failure	5,557	0·79	9 per cent
·2	Left ventricular failure	821	1·0	12 per cent
·3	Others	858	2·2	8 per cent

Hypertensive disease and hypertensive heart disease is, like angina pectoris, losing ground before the progressive spread of coronary artery disease. The Seventh Revision of the Classification almost wiped out ICD No. 447, but increased the numbers allocated to ICD No. 445 by 200 annually (an increase of 100 per cent):

Hypertensive heart disease				Hypertensive disease			
ICD No.	Cause	Annual average	M/F ratio	ICD No.	Cause	Annual average	M/F ratio
440	Benign	222	0·66	444	Benign	4,421	0·76
441	Malignant.. ..	92	1·45	445	Malignant		
					up to 1957 ..	219	
					1958 onward ..	478	1·7
442	With nephrosclerosis	239	0·84	446	With nephrosclerosis	758	0·95
443	Other	10,971	0·71	447	Other		
					up to 1957 ..	1,917	
					1958 onward ..	4	0·83

Note.—The annual average figures given above are the actual number recorded and unlike the estimates given at page 228 are not adjusted for trends.

The only secular trends of importance are all decreases:

ICD No.

- 443 —2 per cent per year
- 446 —7 per cent per year
- 447 —6 per cent per year (up to 1957)

General arteriosclerosis is presumably the basis of most degenerative disease of the heart in later life, and it is surprising that following the Seventh Revision, the 11,000 deaths annually under this category were reduced by such a small proportion (1½ per cent). Before the revision this group was declining by 4 per cent each year; after the revision it increased by 3 per cent each year. The average M/F ratio was 0·78.

Aneurysms of the heart or aorta may be classified either as a complication of syphilis (ICD No. 022), as congenital or, if reported to be non-syphilitic, to ICD No. 451. In the Seventh Revision aneurysms of the abdominal aorta not reported to be syphilitic were transferred from ICD No. 022 to ICD No. 451 and this involved the transfer of about 120 deaths per annum:

ICD No.	Cause	1955–1957		1958–1961	
		Annual average	M/F ratio	Annual average	M/F ratio
022	Syphilitic aneurysm	596	1·9	453	1·4
451	Other aneurysms	1,333	1·2	2,233	1·3

Aneurysm of other arteries (ICD No. 452) have a higher M/F ratio, 1·9, and increased from 50 to 80 annually at the change in classification.

Diseases of the arteries (ICD Nos. 453-456) account for few deaths:

ICD No.	Cause	Annual average	M/F ratio
453·1	Thrombo-angiitis obliterans	32	5·5
Rest of 453	Other peripheral vascular disease	44	1·4
454	Arterial embolism and thrombosis	83	0·7
455	Gangrene (cause unspecified)	36	1·1
450·1	Gangrene (arteriosclerotic)	1,056	1·0
456	Other diseases of arteries	131	0·9

The latter group is increasing by 14 per cent annually and so is the group comprising the remainder of ICD No. 453 without 453·1.

Diseases of the veins are not responsible for many deaths but they are of considerable medical importance:

ICD No.	Cause	Annual average	M/F ratio
463	Phlebitis of lower extremities	335	0·50
465	Pulmonary embolism	1,095	0·83
466	Other venous embolism and thrombosis ..	875	0·54

The latter two categories are increasing 10 per cent annually.

Heart failure and other vague diagnoses referable to the cardiovascular system (ICD No. 782) average only 78 deaths annually; and deaths from ill-defined causes (ICD No. 795) only 31 each year. This is a very small proportion of the 180,000 deaths assigned to the cardiovascular system.

General Review of Cardiovascular Diseases

Before reviewing the situation described in greater detail above it is useful to have on record the average population of the age-groups considered with their annual trend in number:

Age Group	Mean value 1955-1961		Annual trend		
	Persons (thousands)	M/F ratio	Persons (thousands)	Percentage increase M F	
0-	716	1·06	20	2·8	2·8
1-4	2,706	1·05	43	1·6	1·6
5-19	9,808	1·04	97	1·1	0·8
20-34	8,816	1·00	64	-0·6	-0·9
35-54	12,732	0·97	12	0·2	0·0
55 and over ..	10,427	0·73	171	1·7	1·6

When interpreting the sex ratio M/F given in previous sections, account needs to be taken of the numerical inequality of the sexes in the population exposed to risk of death.

Differences in the incidence of disease upon the two sexes are well known and the outstanding differences revealed by the deaths during the past seven years can be briefly summarized:

Predilection for males

ICD No.	Cause	Corrected M/F ratio at ages					
		0-	1-4	5-19	20-34	35-54	55
453·1	Thrombo-angiitis obliterans						7·5
411	Aortic valve (rheumatic)				3·7	3·2	1·9
420·0	Arteriosclerotic heart disease					3·7	1·2
420·1	Coronary artery disease				6·5	6·3	2·0
420·2	Angina pectoris					6·1	1·6
421·1	Aortic valve					4·2	1·7
430	Acute and subacute endocarditis				1·5	2·0	2·0
431	Acute myocarditis					1·5	1·1
441	Malignant hypertensive heart disease						2·0
445	Malignant hypertension						2·3
451	Aneurysm of aorta (non-syphilitic)						1·7
452	Other aneurysms						2·5
754	Congenital circulatory malformations	1·2	1·0	1·2	1·1	1·2	1·3

Predilection for females

ICD No.	Cause	Corrected M/F ratio at ages	
		35-54	55 and over
414	Rheumatic endocarditis (other than mitral and aortic)	0·64	0·81
415	Rheumatic myocarditis		0·75
416	Other rheumatic disease	0·72	0·69
434·0	Kyphoscoliotic heart disease		0·71
463	Pulmonary embolism	0·84	0·69
466	Other venous embolism or thrombosis	0·91	0·74

Changing sex ratio

ICD No.	Cause	Corrected M/F ratio at ages			
		5-19	20-34	35-54	55 and over
410	Mitral valve	1·16	0·58	0·54	0·60
421·0	Mitral valve (non-rheumatic)		1·0	1·6	0·68
422	Myocardial degeneration		1·2	1·3	0·90
330	Subarachnoid haemorrhage	1·6	1·1	0·78	0·69
331	Cerebral haemorrhage		1·2	0·95	0·91

A frequent tendency is for the male excess in younger age-groups to become less marked in later years; or for the female excess to become more prominent. Both features can be summed up as earlier appearance of cardiovascular damage in males. Although related categories tend to give the same age-pattern of sex ratios, there are a few outstanding peculiarities. An example is the mitral valve, which appears to cause death more readily in females, irrespective of aetiology, contrasted with the aortic valve which appears to be a more susceptible site in males. Rheumatic, kyphoscoliotic and venous pathology flourish better in the female; while the male suffers more in his arteries.

Geographical variations

Death rates from all causes at ages 45 and over are known to be lowest in rural areas and highest in the larger urban areas and in conurbations. This population density gradient also holds for cardiovascular diseases, both as a whole and for many of the individual forms. There are however some exceptions particularly in the diagnosis of myocardial degeneration (*see* Tables XCVI and XCVII).

London is the biggest conurbation, but its death rate from all causes is relatively favourable, especially for women; and this advantage holds for vascular lesions affecting the central nervous system, and deaths attributed to myocardial degeneration, and to functional and other diseases of the heart. It is not so advantageous for arteriosclerotic and coronary artery disease and least of all for chronic rheumatic heart disease and endocarditis. At ages 65 and over London has the highest rates in the country for this latter group.

London also has an undue proportion of deaths at all ages from syphilitic aneurysm of the aorta (ICD No. 022·1)—two thirds of all deaths in females and one and a half of all deaths in males. It also has relatively more deaths from diseases of the aortic valve specified as rheumatic (ICD No. 411) and more deaths from essential benign hypertension (ICD No. 444).

Deaths at all ages, 1961

ICD No.	Disease		England and Wales	London and South East	Greater London Conurbation
022·1	Syphilitic aneurysm of aorta ..	M	54	31	29
		F	34	22	22
411	Diseases of the aortic valve specified as rheumatic	M	362	139	129
		F	198	88	76
444	Essential benign hypertension ..	M	2,035	664	535
		F	2,733	924	751
Percentage of total population					
		M	100	23·3	17·2
		F	100	24·6	18·1

Of the other conurbations, those in the north west and north have the highest death rates from all causes and also for many cardiovascular diseases including vascular lesions of the central nervous system, and arteriosclerotic and coronary artery disease. For the 45–64 and over 65 age-groups the mortality ascribed to chronic rheumatic heart disease in some of these conurbations is almost double that in other areas (Tables XCVI and XCVII).

There are however many exceptions to this general picture. Although rural districts usually have lower mortality, they return some of the highest death rates for myocardial degeneration in the older age-groups (Table XCVII), a disease for which the lowest death rates are recorded in the Greater London and Merseyside conurbations. It suggests that this and other peculiarities may depend upon the accessibility of means of making a precise diagnosis.

Table CXX. Geographical variation in diseases of the cardiovascular system, average death rates per thousand living and deviation from average, by sex at ages 45-64 and 65 and over, 1959-1961, England and Wales

	All causes (ICD Nos. 330-334)				Chronic rheumatic heart disease and chronic endocarditis (ICD Nos. 410-416, 421)				Arteriosclerotic and coronary heart disease (ICD No. 420)			
	45-64		65 and over		45-64		65 and over		45-64		65 and over	
	M	F	M	F	M	F	M	F	M	F	M	F
England and Wales ..	13.55	7.32	81.14	59.25	1.08	0.95	11.62	11.56	0.31	0.37	0.87	1.00
Average 1959-1961												
Regions:												
Northern ..	1.07	0.70	2.17	4.44	0.21	0.20	2.50	2.30	0.55	0.38	1.20	1.92
East and West Ridings ..	0.85	0.49	3.63	3.44	0.04	0.04	1.51	1.11	0.41	0.16	1.16	1.46
North Western ..	2.14	0.98	8.05	6.24	0.23	0.18	1.94	1.60	0.71	0.20	1.37	0.53
North Midland ..	1.07	0.25	2.77	0.76	0.01	0.01	0.38	0.05	0.43	0.11	1.99	0.88
Midland ..	0.35	0.08	1.09	0.08	0.10	0.02	0.23	0.12	0.40	0.08	1.76	0.82
Eastern ..	2.60	1.01	9.30	5.13	0.23	0.09	1.59	0.65	0.72	0.14	1.31	0.64
London and South Eastern ..	0.48	0.48	1.10	2.81	0.19	0.17	1.97	1.68	0.14	0.15	0.16	0.24
Southern ..	1.38	0.74	6.19	5.04	0.14	0.11	1.13	1.02	0.35	0.18	0.35	0.33
South Western ..	1.10	0.29	0.38	0.64	0.03	0.00	1.09	0.32	0.36	0.06	0.01	0.64
Wales ..	1.06	0.64	4.28	3.36	0.13	0.18	0.69	1.66	0.56	0.16	0.74	0.24
Conurbations:							Deviation from average					
Tyneside ..	2.11	0.66	6.19	3.26	0.37	0.17	3.02	1.68	0.53	0.37	0.66	1.40
West Yorkshire ..	1.95	0.73	7.61	4.98	0.14	0.05	2.22	1.30	1.09	0.32	3.41	2.56
South East Lancashire ..	2.89	1.05	8.88	7.26	0.28	0.11	2.13	1.66	0.62	0.10	0.00	0.38
Merseyside ..	2.71	1.08	10.26	7.35	0.16	0.11	1.12	1.94	0.91	0.38	3.17	1.37
West Midlands ..	1.37	0.04	0.98	1.20	0.15	0.05	0.25	0.07	0.36	0.13	2.15	0.64
Greater London ..	0.22	0.46	0.37	3.06	0.22	0.21	2.76	2.42	0.03	0.15	0.52	0.01
Areas outside conurbations:												
Urban areas with population of 100,000 and over ..	0.97	0.34	5.54	2.24	0.10	0.03	1.14	0.86	0.20	0.05	1.35	0.78
Urban areas with population of 50,000 and under 100,000 ..	0.21	0.09	2.84	0.48	0.03	0.05	0.41	0.76	0.08	0.02	0.98	0.08
Urban areas with population of under 50,000 ..	0.48	0.07	0.88	0.15	0.02	0.06	0.49	0.55	0.03	0.02	0.24	0.29
Rural areas ..	2.05	0.42	7.69	2.50	0.09	0.00	0.52	0.12	0.57	0.08	1.73	0.76

There are differences in the pattern shown in the South East Lancashire conurbation compared with Merseyside; the former has high rates for myocardial degeneration, whilst Merseyside has high rates for arteriosclerosis. But both are alike in having high death rates in females from chronic rheumatic heart disease at ages 45-64: at ages 65 and over higher rates are recorded for Greater London.

Place of death and mode of certification

It would be useful to compare the accuracy of diagnosis in various forms of heart disease, but this is complicated by the different proportions dying in hospital or elsewhere and the different proportions reported to the coroner, both factors which influence the probability of a post-mortem examination being held.

It is known that post-mortems are held in a larger proportion of deaths of young persons than in older persons, and the effect of this can be seen in the proportion of fatal vascular lesions of the central nervous system coming to autopsy.

ICD No.	Cause	Total deaths (1961)	Post-mortem held		Coroner's enquiry held Per cent
			Number	Per cent	
330	Subarachnoid haemorrhage .. M F	1,328	649	48.9	} M 7.0 F 6.1
		2,105	1,041	49.5	
331	Cerebral haemorrhage M F	11,444	1,782	15.6	
		16,827	2,128	12.6	
332	Cerebral embolism and thrombosis M F	15,311	1,098	7.2	
		22,368	1,278	5.7	
334	Other vascular lesions of C.N.S. .. M F	3,076	138	4.5	
		4,562	157	3.4	

Although a larger proportion of deaths from arteriosclerotic heart disease occur in hospital (Table CXXII), the percentage confirmed by autopsy is small. High post-mortem confirmation rates are found for coronary artery disease; very low rates for angina pectoris—a diagnosis based on symptoms. The high post-mortem confirmation rate for benign hypertension without heart disease tends to support the decreasing importance being placed on hypertension as a cause of heart disease; it is curious that so many come to a coroner's enquiry.

Major trends

After allowing for increases due to the increased population at risk, the main interest is in distinguishing absolute increases in any category during the past seven years from apparent increases due to transfers from other categories. For this latter to be an acceptable explanation the cases transferred should be of the same age and sex and should approximate in number; and there should also be similarities in medical circumstances which would make such a transfer a reasonable possibility.

In infancy the largest increase (in congenital heart disease) amounts to 4 per cent each year, and the major part of this increase can be explained by the

increase in the under 1 year population (2·8 per cent). At ages 5–19 the increase in congenital heart disease of 8·7 per cent each year is much greater than the population increase (1 per cent) but can be balanced to some extent by a decrease in mitral valve disease. In young adults the biggest change is a decrease in mitral valve disease. New diagnostic methods associated with the development of cardiac surgery appear adequate explanation for any increase in deaths attributed to congenital defects.

Not until middle age (35–54) is there any clear evidence of a substantial increase in any category. Coronary artery disease increases 3·7 per cent each year in this age-group; population increase cannot account for much of this, and only one fifth can be offset by decreased myocardial degeneration. Changes in mitral valve disease and cerebral haemorrhage are unlikely to offer an explanation of the increase. There is a residual increase in coronary artery disease amounting to 3·8 per cent each year for males only.

In the elderly the increase in coronary artery disease and arteriosclerotic heart disease is counterbalanced by decreases in myocardial degeneration, and to a minor extent by the population increase. Similarly, increased cerebral embolism and thrombosis is almost completely counterbalanced by a decrease in cerebral haemorrhage. Increases in congestive heart failure, left ventricular failure and other forms show increases which are almost as numerous as the decreases in hypertensive heart disease. The only *prima facie* increases which cannot be readily matched by decreases elsewhere are of aortic valve disease (ICD No. 421·1) and aortic aneurysm, both syphilitic (ICD No. 022) and non-syphilitic (ICD No. 451).

Table CXXI. Deaths from cardiovascular diseases showing salient changes at different periods of life, 1955 to 1961, England and Wales

ICD No.		1955	1956	1957	1958	1959	1960	1961
754	Infancy (0–)							
	Congenital	1,075	1,183	1,278	1,254	1,308	1,359	1,428
754	Pre-school children (1–4)							
	Congenital	156	117	131	158	142	167	159
	Children and young persons (5–19)							
754	Congenital	156	150	167	171	202	237	240
401	Acute rheumatism	56	58	33	26	25	23	20
410	Mitral valve	62	51	44	20	15	15	18
	Young adults (20–34)							
410	Mitral valve	385	372	331	283	212	200	209
411	Aortic valve (rheumatic)	36	27	32	17	17	24	19
	Middle age (35–54)							
401	Acute rheumatism	34	40	33	16	16	14	13
410	Mitral valve	1,877	1,860	1,924	1,629	1,516	1,454	1,558
414	Rheumatic endocarditis (other than mitral, aortic and tricuspid)	188	171	182	137	127	135	120
416	Other rheumatic heart disease	306	294	331	300	340	379	378
420·1	Coronary artery disease	7,363	7,707	7,861	8,524	8,443	8,999	9,196
420·2	Angina pectoris	39	32	27	23	7	10	15
421·4	Other non-rheumatic chronic endocarditis	92	79	81	80	70	64	65
422	Myocardial degeneration	687	552	472	405	357	321	303
430	Acute and sub-acute endocarditis	121	113	109	101	106	98	90
466	Other venous embolism and thrombosis	84	93	104	107	102	114	139
330	Subarachnoid haemorrhage	966	1,026	1,010	1,027	1,020	1,090	1,079
331	Cerebral haemorrhage	2,371	2,304	2,382	2,135	2,002	2,075	1,876
332	Cerebral embolism and thrombosis	692	603	617	628	590	600	579

Table CXXI—continued

ICD No.		1955	1956	1957	1958	1959	1960	1961
	Elderly (55 and over)							
754	Congenital	105	100	152	125	102	135	163
410	Mitral valve	3,776	3,632	3,571	3,330	3,189	3,268	3,345
414	Other rheumatic endocarditis	406	385	335	292	278	258	282
415	Rheumatic myocarditis	177	165	165	138	123	86	107
416	Other rheumatic heart disease	546	579	617	633	627	681	752
420-0	Arteriosclerotic heart disease	557	562	722	986	895	1,126	1,399
420-1	Coronary artery disease	61,800	65,750	67,051	73,884	74,968	81,256	84,643
420-2	Angina pectoris	648	519	469	411	376	340	298
421-0	Mitral valve (non-rheumatic)	104	155	243	296	310	306	314
421-1	Aortic valve	1,605	1,652	1,910	1,908	1,813	2,045	2,115
421-4	Other chronic rheumatic endocarditis	825	746	751	651	575	540	482
422	Myocardial degeneration	64,073	61,659	55,157	53,319	48,586	46,671	46,609
433	Functional disease	2,463	2,503	2,462	5,441	5,078	4,977	5,045
434	Other disease of heart	5,148	5,525	6,428	6,510	6,681	7,460	8,502
443	Other hypertensive heart disease	11,659	11,565	11,150	11,251	10,447	10,401	10,324
445	Malignant hypertension	222	209	226	502	544	450	414
446	Hypertension with nephrosclerosis	956	858	753	768	737	622	614
447	Other hypertension	2,038	1,900	1,812	7	3	4	4
450-0	General arteriosclerosis (without gangrene)	10,487	10,241	9,643	9,640	9,643	9,854	10,571
450-1	General arteriosclerosis (with gangrene)	1,085	1,064	958	1,025	1,011	1,105	1,147
451	Aortic aneurysm (non-syphilitic)	1,204	1,344	1,450	2,132	2,084	2,349	2,366
456	Other disease of arteries	72	103	112	139	132	165	192
465	Pulmonary embolism and thrombosis	821	883	899	991	1,210	1,334	1,530
466	Other venous embolism and thrombosis	621	759	787	791	905	1,022	1,242
330	Subarachnoid haemorrhage	1,745	1,837	1,846	1,987	1,898	2,125	2,100
331	Cerebral haemorrhage	29,020	28,348	26,900	27,498	26,212	26,837	26,299
332	Cerebral embolism and thrombosis	33,748	34,542	35,074	36,475	36,586	36,663	37,088
334	Other vascular lesions of C.N.S.	5,172	5,356	5,400	6,013	6,407	5,425	7,577

Table CXXII. Deaths from cardiovascular diseases showing (a) number and percentage of total deaths by sex according to type of institution etc., in which they occurred, (b) post mortems held and (c) Coroner's enquiries made, 1961, England and Wales

ICD Nos.	Cause	Total deaths (1961)	N.H.S. and private hospitals and nursing homes only		N.H.S. and private hospitals, nursing homes, also home address, mental hospitals, institutions and elsewhere		Coroner's enquiry	
			Dying in hospital		Post-mortem held		Number	Per cent
			Number	Per cent	Number	Per cent		
420.0	Arteriosclerotic heart disease	608 805	381 515	62.7 64.0	34 38	5.6 4.7	M 19,490 F 9,068	25.6 13.6
420.1	Coronary artery disease	57,611 36,438	18,331 12,613	31.8 34.6	21,883 10,142	38.0 27.8		
420.2	Angina pectoris	177 136	12 14	6.8 10.3	—	—		
422	Myocardial degeneration	17,632 29,335	4,010 7,327	22.7 25.0	969 1,403	5.5 4.8		
433	Functional disease	1,868 3,309	552 1,067	29.6 32.2	68 104	3.6 3.1	22 33	1.2 1.0
443	Hypertensive heart disease	4,248 6,412	1,465 2,183	34.5 34.0	819 764	19.3 11.9	563 521	13.3 8.1
444	Benign hypertension	2,035 2,733	776 918	38.1 33.6	710 743	34.9 27.2	578 617	28.4 22.6

SUICIDE, 1901 to 1961

Introduction

Suicide is not one of the causes of death which make headlines in the newspapers. The annual variations in the incidence rate are small and it is only when the rates over a considerable period of time are examined that more striking changes are noticed. The Suicide Act of 1961 marks the end of an epoch; the Act made it no longer a crime to take one's life. It would therefore seem to be an appropriate time for examining the trends in suicide in the years leading up to 1961.

The epidemiology of suicide has been well documented from comparatively early in the nineteenth century. The systematization of our concepts of suicide is largely due to Durkheim¹. He pointed out that suicide is usually regarded as the result of a positive and violent act, involving the use of a certain amount of muscular strength, but death may just as readily result from a purely negative attitude or a simple abstention. Thus a man can bring about his own death just as well by refusing to eat as by shooting himself. The question then arises whether a person who runs a sure risk of death, as for example, a soldier who deliberately draws the enemy fire in order to save his regiment, is to be regarded as committing suicide. This man, while courting death, does not desire it; nevertheless, when devotion leads to the sacrifice of life, scientifically it must be regarded as suicide. Durkheim therefore defined suicide as a cause of death which results directly or indirectly from a positive or negative act, performed by the victim himself and which he knows should certainly produce this result.

Durkheim showed that suicide rates varied inversely in relation to the degree of integration of an individual in a social group, whether religious, domestic or the body politic. Society disintegrates when the individual puts himself and his good above the good of society as a whole. He therefore lives for himself instead of performing his duties to society. The evils he might be prepared to bear for the collective good he is not willing to bear for himself and he therefore arrives at the stage when he no longer sees anything to live for. If the state of excessive individualism is called egoism, the type of suicide resulting from it may be called egoistic. In contrast to this is the altruistic type of suicide, for example, of old or sick people who do not want to be a burden on their relatives, or women who kill themselves after the death of their husbands.

A third type of suicide was attributed by Durkheim to "anomie" or "normlessness". For example, it was found that financial or industrial crises raised the suicide rate, not because of the poverty they caused, because crises of prosperity had the same effect, but simply because they were crises, deviations from the norm. Similarly, stable families being a norm of society, the highest suicide rates were found in countries where divorce or separation were frequent and lowest where they were rare.

Durkheim's threefold classification appears to be as valid today as when he formulated it, and the concept of anomie is a particularly useful one in the study of urban conditions.

¹ Durkheim, E. (1897) *Le Suicide*.

The reliability of suicide statistics is often questioned. It is thought that some suicides, especially by poisoning, may be described as accidental deaths. Others which are indirectly due to suicidal injury may not be classed to suicide; for example, fatal septicaemia following suicidal wounding, where there is uncertainty about intention or the train of events leading to death, may be classed to septicaemia. It is also contended that in countries or cultures where there are religious sanctions against the taking of one's life, it may be expected that suicide rates will be lower than elsewhere, but this difference may be artificial. The decision as to whether a death is suicidal or not, often depends on a known declaration of intention to commit suicide; in the absence of such a statement it is often difficult to decide, as for example in the deaths of old people from coal-gas poisoning, since elderly people are liable to forget that they have turned on the gas taps, while an impoverished sense of smell may result in their not detecting the escape of gas.

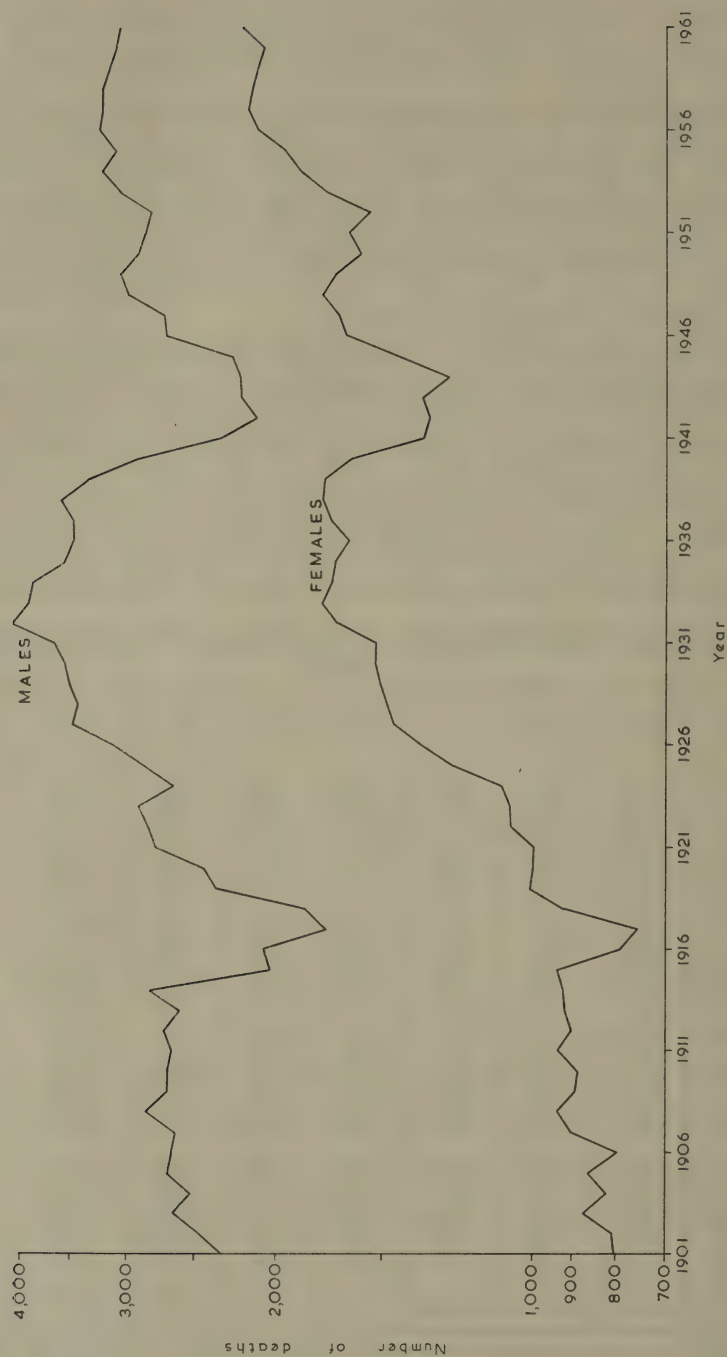
If the accuracy of figures for successful suicide is difficult to establish, the position with regard to non-fatal attempts has been worse. There can be little doubt that the fact that until 1961 a suicidal attempt was liable to attract criminal proceedings contributed to the reluctance of those concerned to bring such an attempt to official notice. In the past the legal attitude to attempted suicide has not been one which could readily be characterised as "forward-looking". "The original penalties (for suicide) were burial at a cross roads with a stake through the heart, and forfeiture of goods to the Crown. As a result of pressure of public opinion, this form of burial was discontinued

Table CXXIII. Deaths from suicide, at all ages, by sex, 1901 to 1961, England and Wales

Year	Males	Females	Year	Males	Females	Year	Males	Females
1901	2,318	803	1921	2,763	996	1941	2,318	1,339
1902	2,460	807	1922	2,817	1,059	1942	2,095	1,321
1903	2,640	871	1923	2,887	1,062	1943	2,185	1,343
1904	2,523	822	1924	2,635	1,085	1944	2,190	1,257
1905	2,683	862	1925	2,852	1,232	1945	2,238	1,432
1906	2,655	797	1926	3,099	1,350	1946	2,673	1,639
1907	2,632	901	1927	3,458	1,449	1947	2,694	1,680
1908	2,844	934	1928	3,409	1,473	1948	2,961	1,757
1909	2,683	894	1929	3,480	1,504	1949	3,023 (1)	1,697
1910	2,680	887	1930	3,527	1,524	1950	2,885	1,586
1911	2,655	933	1931	3,624	1,523	1951	2,831	1,638
1912	2,706	902	1932	4,054	1,689	1952	2,788	1,550
1913	2,596	918	1933	3,893	1,761	1953	3,020	1,734
1914	2,802	922	1934	3,839	1,711	1954	3,178	1,865
1915	2,029	937	1935	3,525	1,698	1955	3,060	1,940
1916	2,063	792	1936	3,441	1,638	1956	3,198	2,084
1917	1,740	755	1937	3,447	1,718	1957	3,170	2,145 (1)
1918	1,845	920	1938	3,558	1,758	1958	3,175	2,123
1919	2,340	1,008	1939	3,307	1,747	1959	3,116	2,091
1920	2,427	998	1940	2,894	1,623	1960	3,058 (1)	2,054
						1961	3,025	2,175 (1)

Figures in brackets show deaths from late effects of suicides, prior to 1949 these were included in total. Prior to 1940 self-induced abortion with fatal outcome was classed as suicide.

Diagram 12



Annual deaths from suicide 1901 to 1961, England and Wales

from 1824, but suicides had to be buried between 9 and 12 at night without any ceremonial in unconsecrated ground. This was not repealed until the 1880s. The confiscation of goods was discontinued from 1870². Suicide, however, remained a felony in law, and this gave rise to the custom of coroners' juries giving a verdict in many cases that the deceased was of unsound mind. This finding of insanity excluded a verdict of felony.

One of the arguments against amending the law was that it would lead to an increase in suicides. No evidence was found to support the claim that to treat suicidal attempts as criminal acts was a deterrent. Scotland, with no law against suicide, consistently had lower suicide rates than England and Wales. Under the provisions of the Suicide Act of 1961, attempted suicide ceased to be a criminal offence.

Suicides and suicide rates by sex and age

Table CXXIII and Diagram 12 show the annual deaths from suicide in England and Wales during 1901 to 1961. Before 1940, the female deaths included cases of self-induced abortion with fatal outcome; these were excluded from 1940 onwards. Their effect on the statistics may be seen from the following data for the years 1931 to 1939:

Female		1931	1932	1933	1934	1935	1936	1937	1938	1939
Including abortion	self-induced	1,523	1,689	1,761	1,711	1,698	1,638	1,718	1,758	1,747
Excluding abortion	self-induced	1,484	1,653	1,709	1,662	1,659	1,602	1,678	1,724	1,689

There was thus an average annual difference of about 43 deaths over the period.

The numbers of suicides among both sexes decreased during the wars of 1914–18 and 1939–45. During the First World War the number of male suicides dropped in 1915, but the female not until 1916, whereas in the Second, the numbers of both male and female suicides dropped in 1940, even when allowance is made for the exclusion of fatal self-induced abortion. The relatively quicker mobilisation of women, particularly of middle-aged women, into the Voluntary Services during the latter period may help to account for this. The number of male suicides reached a maximum value during 1931–34, the annual average being about 3,850. This increase is commonly associated with the economic depression of the early thirties and the resulting increase in unemployment. Swinscow³, however, while agreeing that unemployment is influential, directly or indirectly, in causing men to commit suicide, nevertheless points out that “unemployment may be either the sign or the cause of other social disorders that have a more direct relation to the problem”. The suicide rates for men aged 65 and over, who have reached the retirement age, followed the same pattern as those for all males. Swinscow concludes that the figures suggest that “when society is in such a condition that many men are unemployed, then we may expect an unusually high incidence of suicide in men. It is unsafe to speculate from this evidence on how direct is the relation between suicide and unemployment”.

² *Proc. Roy. Soc. Med.* (1958), 50. 297.
³ Swinscow, D. (1951). *Brit. med. J.* 1. 1417–1423.

Although from 1943 onwards there was an upward trend in the male numbers, reaching 3,198 in 1956, there has since been a small yearly decrease. The number of female suicides, while showing rather similar fluctuations to that of males, nevertheless displays over the whole period of sixty years a steep upward gradient. Whereas male suicides increased by 31 per cent, female suicides increased by 171 per cent. During 1901–5 the ratio of male to female suicide deaths was 3.03; during 1957–61 it was 1.47. The causes of suicide, whether psychological, social, industrial, or physical illness, appear to be having a greater effect on females than on males.

Table CXXIV. Suicides: Crude death rates per million living, by sex, 1901 to 1961 England and Wales

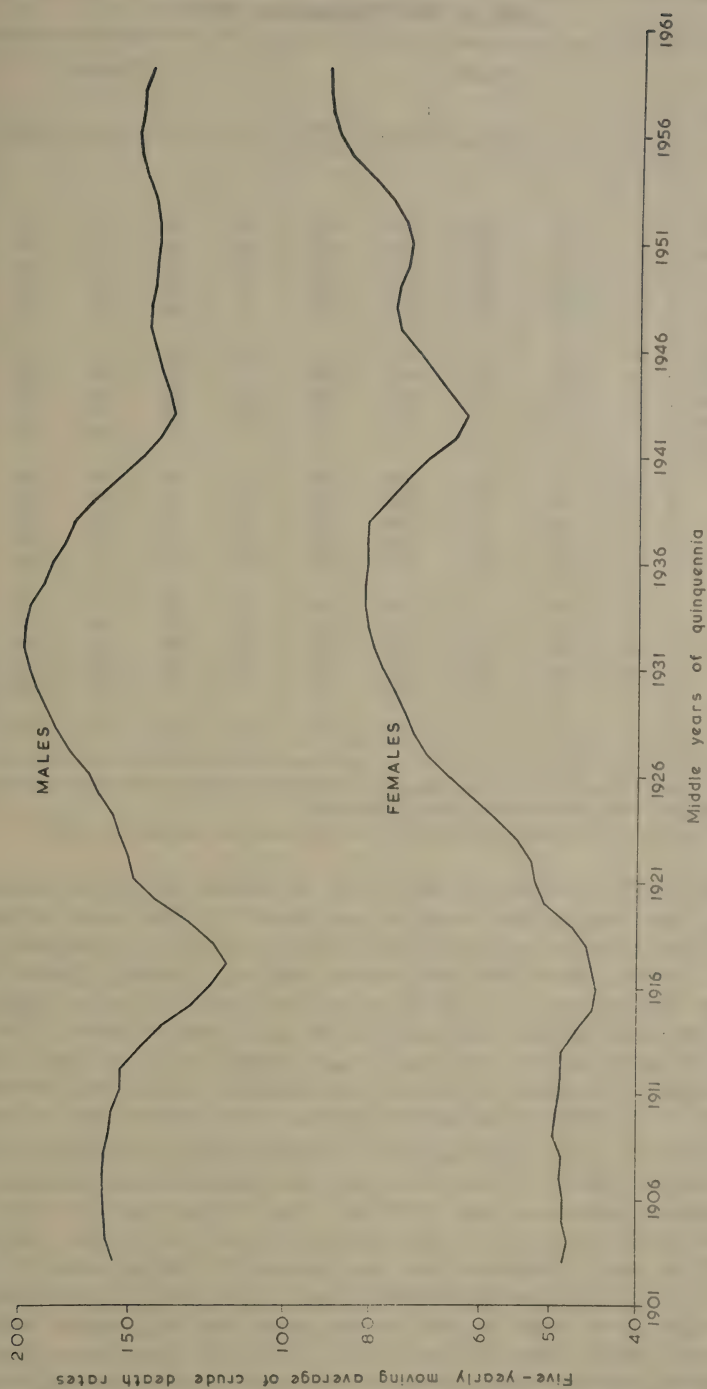
Year	Males	Females	Year	Males	Females	Year	Males	Females
1901	147	48	1921	153	50	1941	135	62
1902	154	47	1922	156	54	1942	125	62
1903	164	51	1923	157	53	1943	134	63
1904	155	47	1924	142	54	1944	135	58
1905	163	49	1925	153	61	1945	136	66
1906	160	45	1926	166	66	1946	144	75
1907	157	50	1927	184	71	1947	137	76
1908	167	51	1928	180	72	1948	145	79
1909	157	49	1929	183	73	1949	147	75
1910	155	48	1930	185	74	1950	136	70
1911	152	50	1931	189	73	1951	135	72
1912	153	48	1932	210	81	1952	132	68
1913	147	49	1933	201	84	1953	142	76
1914	157	48	1934	198	81	1954	149	81
1915	113	48	1935	181	80	1955	143	84
1916	115	41	1936	176	77	1956	149	90
1917	100	38	1937	175	81	1957	146	92
1918	114	47	1938	180	82	1958	146	91
1919	136	51	1939	168	81	1959	142	89
1920	134	51	1940	159	75	1960	139	87
						1961	135	91

Rates for the years 1915–1918 for both sexes, 1939–1949 for males and 1941–1949 for females are based on civilian deaths and civilian populations.

Prior to 1940 self-induced abortion with fatal outcome was classed as suicide.

Table CXXIV shows the crude death rates due to suicide and Diagram 13 the 5-yearly moving average of the rates. The decrease in the rates in the early years of the century was greater for men than women. Between the quinquennia 1905–9 and 1915–19 there was a decrease of 28 per cent in the average rate for males from 160.8 to 115.6 per million living. The female average reached a maximum value of 49.6 for 1907–11 and decreased by 10 per cent to 44.4 for the period 1914–18. Both average rates reached a second minimum in the period 1941–45 and it is in the post-war years that there has been a very sharp rise in the female rate compared with the male. The female average rate rose by 45 per cent from 62.2 for 1941–45 to 90.0 for 1957–61. The highest post-war male average rate was 146.6 per million during 1954–58, representing an increase of 10 per cent on that for 1941–45, and for the last 5-yearly period considered, 1957–61, the male rate was only 6 per cent above that for the war years.

Diagram 13



Five-yearly moving average of suicide death rates, 1901 to 1961, England and Wales.

Table CXXV. Suicides: Death rates per million living by sex and age, 1901 to 1961 England and Wales

Year	Males					Females				
	15-24	25-34	35-44	45-64	65 and over	15-24	25-34	35-44	45-64	65 and over
1901-1905	63	157	250	446	492	42	57	80	107	81
1906-1910	62	148	254	446	458	38	54	81	111	73
1911-1915	65	147	226	372	418	40	52	76	108	72
1916-1920	53	170	206	283	366	31	49	72	95	73
1921-1925	48	100	199	378	471	31	48	78	122	82
1926-1930	59	122	222	427	513	36	66	96	153	105
1931-1935	68	140	210	452	520	37	77	108	159	119
1936-1940	55	116	174	364	474	26	65	99	161	126
1941-1945	53	105	127	223	357	16	52	77	117	103
1946-1950	50	82	129	262	426	19	47	80	146	144
1951 ..	39	78	120	250	431	15	38	66	146	146
1952 ..	45	78	120	248	396	12	35	66	134	141
1953 ..	48	89	126	264	432	16	39	79	145	155
1954 ..	43	93	145	278	433	18	52	77	149	173
1955 ..	40	97	130	257	435	13	45	75	167	174
1956 ..	45	94	130	274	446	19	49	71	178	190
1957 ..	43	94	135	270	427	21	47	80	177	195
1958 ..	46	104	147	266	396	23	50	83	169	190
1959 ..	41	105	135	253	413	23	50	88	167	173
1960 ..	57	115	139	247	347	26	56	86	162	160
1961 ..	51	108	147	238	349	23	55	93	174	168

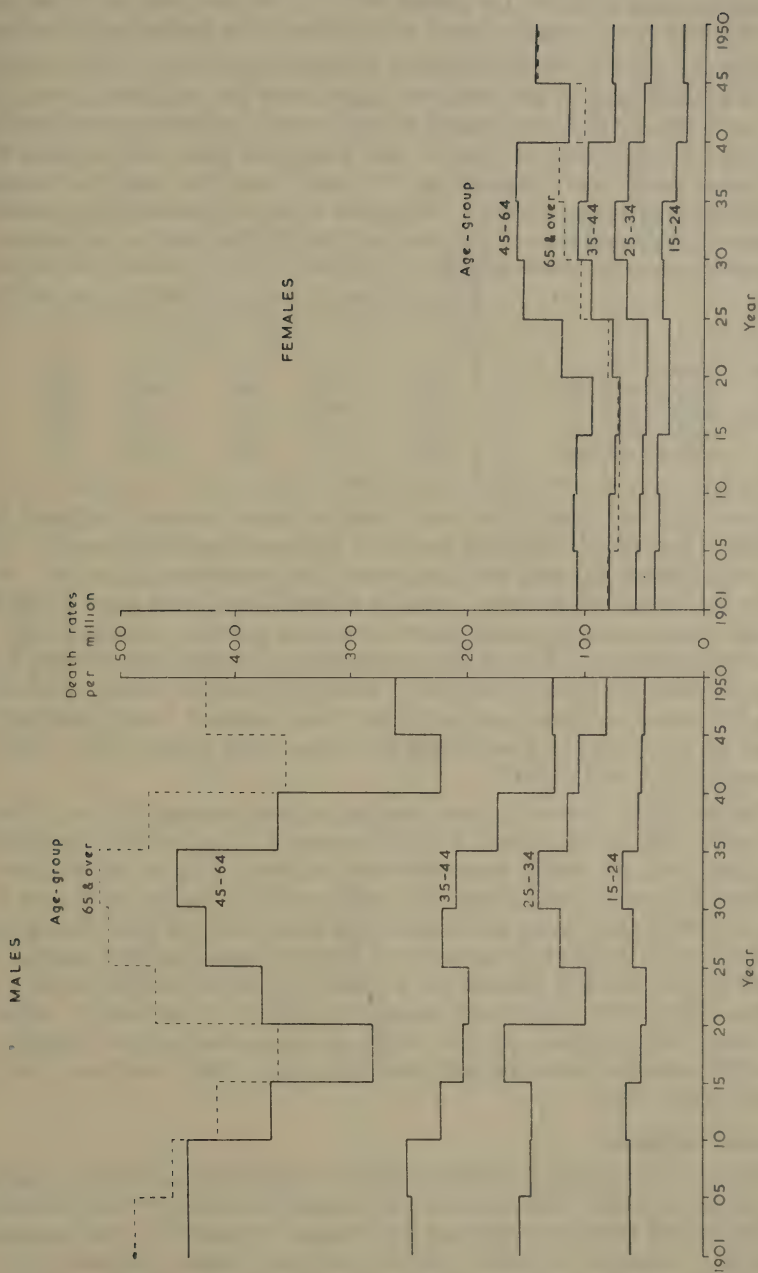
Rates for the years 1915-1918 for both sexes, 1939-1949 for males and 1941-1949 for females, are based on civilian deaths and civilian population.

Prior to 1940 self-induced abortion with fatal outcome was classed as suicide.

Table CXXV and Diagram 14(A) show the suicide rates by sex and five age-groups; very few suicides occur at ages under 15. The excess of male over female rates already commented upon holds for each of the separate age-groups shown. Among males the rates increase with age; among females the rates increase with age up to the 45-64 group, but those for women aged 65 and over were lower than for those aged 45-64 until the last decade. The suicide rates for males increase very much more sharply with age than is the case with females. Diagram 14(A) shows that the trend in the rates for both sexes at ages 15-44 differs considerably from that in the rates at ages 45 and over.

The rates for young people aged 15-24 have shown on the whole a downward trend over the past sixty years, although both male and female rates experienced a temporary increase during 1926-36. The average rate for males during 1956-60 was 27 per cent less than during 1901-06; for females this decrease was 48 per cent. Decreases have also occurred in the age-group 23-34; for males, of 35 per cent, but for females of only 12 per cent. It is noteworthy that males aged 25-34 were the only sex-age group with an increase instead of a decrease in suicide rates during 1916-21. Although there was an increase in their suicide rates, especially during 1931-35, the rate in this latter quinquennium was 140 per million, compared with 170 during 1916-21, the latter being the

Diagram 14 (A)



Suicide death rates per million living by sex and age, 1901 to 1950, England and Wales

highest rate reached by this age-group during the sixty years under review. The rate for females aged 25–34 was 57 per million during 1901–05, decreased to 48 in 1921–25, and reached a maximum value of 77 in 1931–35. After a subsequent drop to 42 for the period 1951–55, the rate rose to 55 per million in 1961, this being roughly equal to its value at the beginning of the century.

For males aged 35–44 the decrease in suicide rates from 250 in 1901–05 to 137 in 1956–60 was 45 per cent, the largest drop for any male group. These men were relatively little affected by the social conditions prevailing during 1926–35. Female rates at ages 25 and over, and male rates at ages 45 and over were much more susceptible. In each case the rates had reached a minimum value during 1916–20. When the rates in succeeding quinquennia are expressed as percentages of the rate in 1916–20, the result is as follows:

				1916–20	1921–25	1926–30	1931–35	1936–40	1941–45
Males,	aged 45–64	..	..	100	134	151	160	129	79
	aged 65 and over	..	..	100	129	140	142	130	98
Females,	aged 35–44	..	..	100	108	133	150	138	107
	aged 45–64	..	..	100	128	161	167	169	123
	aged 65 and over	..	..	100	112	144	163	173	141

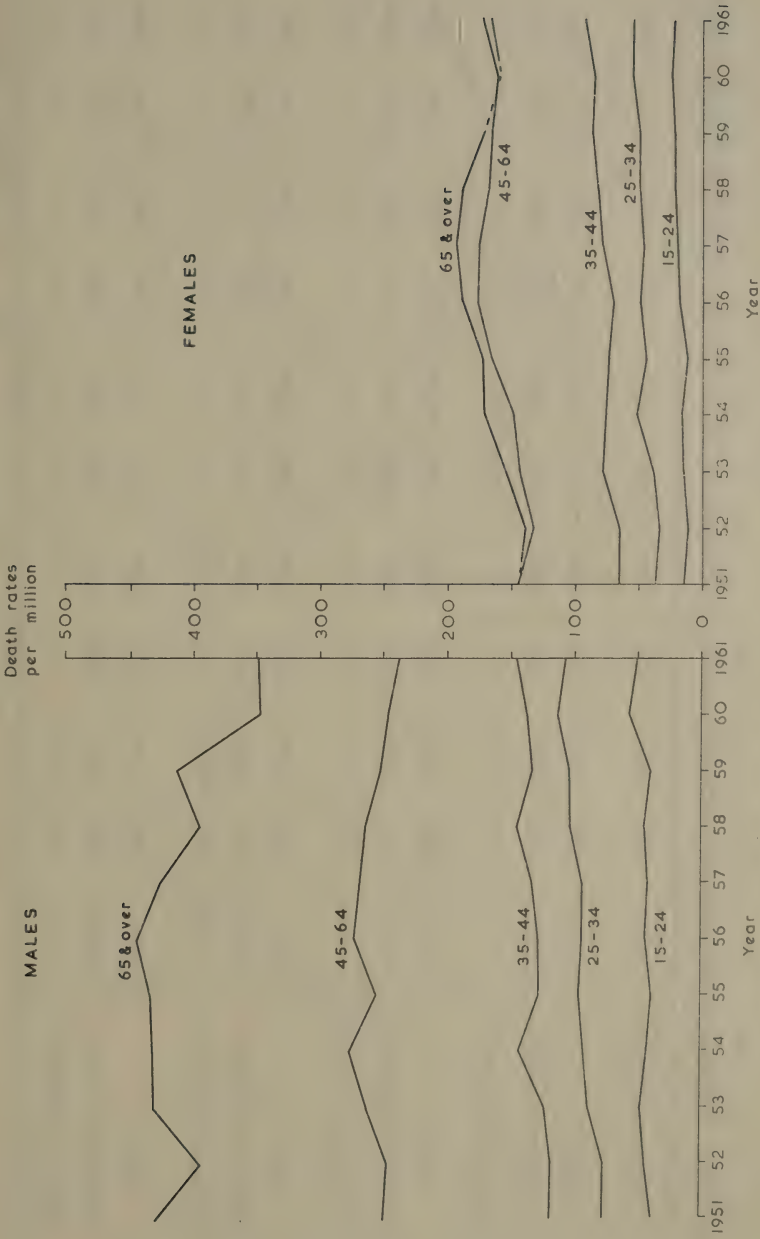
The rate for men aged 45–64 was therefore more seriously affected by the conditions prevailing during the period of large-scale unemployment in 1931–35 than was the rate for men who had passed the retirement age of 65. Women in the age group 45–64 were similarly affected, but those aged 65 and over showed a proportionally much higher rate than males in this age-group. The rates for women aged 45 and over continued to increase up to 1940, whereas those for men dropped in 1936–40. After the decrease during 1941–45, the rates for women of these ages continued their upward trend, reaching peak values of 171 and 182 per million for those aged 45–64 and 65 and over respectively during 1956–60.

Diagram 14(B) shows the rates for single years during 1951–61. The rate for males aged 35–64 appears to have increased in response to the conditions associated with the rise in unemployment in 1954. It is of interest that there has been a decrease since about 1957 in the suicide rates for those aged 65 and over of both sexes. Since this is about the time when the qualifying period of ten years for retirement pensions under the new social security scheme ended, it may be speculated to what extent a greater degree of financial security in old age has affected the suicide rates among the elderly. In particular, retired men with these state pensions are less likely to lose status in their families, than when the monetary provision was smaller, a factor which may have a profound psychological effect.

Seasonal variation

Table CXXVI shows the total suicides by month of occurrence, aggregated for 10-year periods. The numbers per standard months of 30 days have been calculated and also the percentage distribution, by month, of the standardised numbers. Diagram 15 shows that for the three decennia between 1921 and 1950, the highest proportion of suicides occurred during the period April to June, with peaks roughly in April and June. During 1951–60 the peak in April has become more pronounced and that in June has disappeared.

Diagram 14 (B)

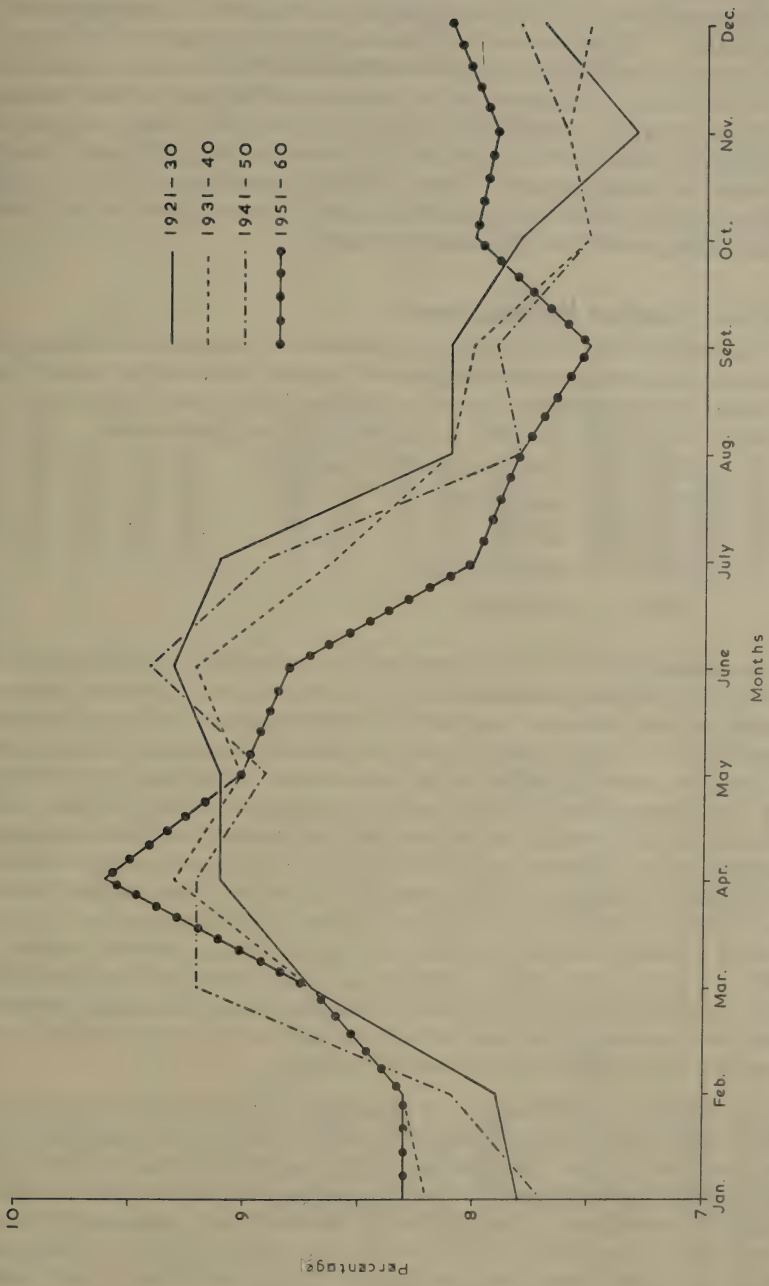


Suicide death rates per million living by sex and age, 1951 to 1961, England and Wales

Table CXXXVI. Percentage distribution of suicides by month of occurrence in 10 year periods 1921-1960, England and Wales

Period	Number of suicides	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1921-30	Total	3,483	3,198	3,888	3,923	4,064	3,992	4,025	3,614	3,499	3,461	3,157	3,405
	Per month of 30 days	3,371	3,402	3,763	3,923	3,933	3,992	3,895	3,497	3,499	3,349	3,157	3,295
	Percentage distribution..	7.8	7.9	8.7	9.1	9.1	9.3	9.1	8.1	8.1	7.8	7.3	7.7
1931-40	Total	4,371	4,066	4,647	4,782	4,827	4,758	4,619	4,331	4,110	3,994	3,904	4,015
	Per month of 30 days	4,230	4,311	4,497	4,782	4,671	4,758	4,470	4,191	4,110	3,865	3,904	3,885
	Percentage distribution..	8.2	8.3	8.7	9.3	9.0	9.2	8.6	8.1	8.0	7.5	7.6	7.5
1941-50	Total	3,155	3,016	3,789	3,672	3,666	3,732	3,639	3,188	3,149	3,069	3,042	3,207
	Per month of 30 days	3,053	3,210	3,667	3,672	3,548	3,732	3,522	3,085	3,149	2,970	3,042	3,104
	Percentage distribution..	7.7	8.1	9.2	9.2	8.9	9.4	8.9	7.8	7.9	7.5	7.6	7.8
1951-60	Total	4,191	3,836	4,394	4,732	4,584	4,328	4,073	3,949	3,697	4,086	3,904	4,087
	Per month of 30 days	4,056	4,067	4,252	4,732	4,436	4,328	3,942	3,822	3,697	3,954	3,904	3,955
	Percentage distribution..	8.3	8.3	8.7	9.6	9.0	8.8	8.0	7.8	7.5	8.0	7.9	8.1

Diagram 15



Percentage distribution of suicides by standard months of 30 days, 1921 to 1960, England and Wales

Swinscow³ investigated the seasonal distribution of suicides in Australia and found a converse distribution to that in this country. He concluded that "such analogies do nothing more than suggest that in the warmer months the relation between the individual and his environment is more strained than in the cooler". If this were so, the unusually hot summers of 1947 and 1951 might have been expected to produce an abnormally high number of suicides, but they did not do so. An alternative hypothesis could be that the high proportion in April to June is a delayed effect of conditions in the winter months, when the weather is bad, sickness, especially influenza is rife, and many industries suffer seasonal unemployment. Similarly the decreased proportions at the end of the year could be due to a persistence into the early winter of the effects of the contrasting benefits of the summer months.

Social class variations in suicide rates

At the time of the 1911 Census of Population, a classification of occupations was devised, and occupations were grouped together into so-called Social Classes. Five social classes whose composition remained fairly stable were used at the censuses of 1921, 1931 and 1951. The basis of classification was:

- Class I Professional and managerial
- Class II Intermediate
- Class III Skilled
- Class IV Partly skilled
- Class V Unskilled.

It is customary for deaths to be classified by the deceased's occupation for three years or so of which the census year is the middle one. Married women are classified by their husbands' occupation. Retired persons and those temporarily unemployed are classed to their former or normal occupation. Since husbands and wives are generally subject to the same environment based on standards of living with their accompanying advantages or disadvantages to health, marked differences in their mortality experience help to provide pointers to occupational hazards of males. Since the age structure of the social classes varies considerably, for purposes of comparison it is customary to use the "Standardised Mortality Ratio (S.M.R.)" which, in the present context, can be defined as the number of deaths occurring among occupied and retired men or married women aged 20-64 in a given social class, expressed as a percentage of the deaths which might have been expected to occur if the given social class had experienced within each age-group the same death rate as that of the total population of occupied and retired men or of married women.

Table CXXVII and Diagram 16 show that for all causes of male deaths, in the two earlier periods there was an increase in the S.M.Rs. going from Social Class I to Class V, but this was less marked in 1930-32 than in 1921-23. In 1950 the S.M.Rs. for Classes II and IV were lower than for Class I, while that for Class V was highest. For suicide the gradient was to some extent reversed. In both 1921-23 and 1930-32, the S.M.R. was highest in Class II, followed by Class I. By 1950 Class I had the highest S.M.R. and Class V had come up into second place, Class III now having the lowest.

³ See page 243.

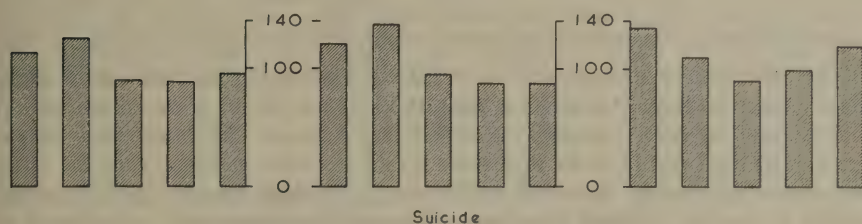
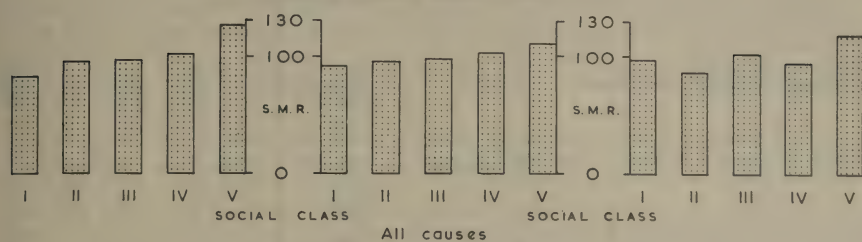
Diagram 16

1921-23

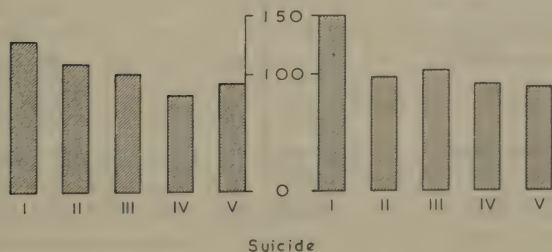
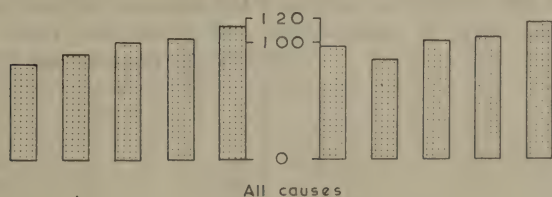
1930-32

1950

Occupied & retired males, aged 20-64



Married women, aged 20-64



Standardised Mortality Ratios for all causes and for suicide by social class 1921-1923, 1930-1932 and 1950, England and Wales

Table CXXVII. Suicide and All causes: Standardised Mortality Ratios, males and married women aged 20-64 according to social class for periods 1921-1923, 1930-1932 and 1950, England and Wales

Persons	Cause	Period	Social Class				
			I	II	III	IV	V
(a) Occupied and Retired males ..	Suicide ..	1921-23	116	128	91	89	98
		1930-32	120	137	95	87	87
		1950 ..	134	110	89	99	119
	All causes ..	1921-23	82	94	95	101	125
		1930-32	90	94	97	102	111
		1950 ..	97	86	102	94	118
(b) Married women	Suicide ..	1930-32	128	109	101	82	92
		1950 ..	150	97	103	91	88
	All causes ..	1930-32	81	89	99	103	113
		1950	96	84	101	104	117

The S.M.Rs. for all causes for married women were almost similar in social class pattern to those for males in both 1930-32 and 1950. For suicide Class I was highest in both periods, the differences between the other four classes tending to level out in 1950, and there was a decrease in Class V in the latter year whereas for males there was an increase. The high Standardised Mortality Ratios for suicide in Class I for both men and married women, and, though to a lesser extent, for men in Class II, suggest that places whose population contains an unduly high proportion of persons in Social Classes I and II may be expected to have suicide rates above the average.

Table CXXVIII. Suicide death rates per million living by sex and ages 15 years and over, in conurbations and urban and rural aggregates, 1955-1959 and 1960-1961, England and Wales

	Year	Males					Females				
		All ages over 15	15-	25-	45-	65 and over	All ages over 15	15-	25-	45-	65 and over
Conurbations	1955-9	205	55	129	273	463	125	25	73	181	213
	1960-1	202	82	144	267	371	128	31	89	183	188
Other urban areas with populations: over 100,000	1955-9	195	33	116	257	492	126	21	69	190	211
	1960-1	181	49	115	230	437	118	28	78	167	185
50,000 and under 100,000	1955-9	206	45	129	278	456	132	16	76	193	223
	1960-1	198	54	147	255	396	126	17	76	191	185
under 50,000	1955-9	187	41	110	257	395	108	14	53	173	168
	1960-1	173	44	127	228	320	107	23	54	169	159
Rural areas	1955-9	166	34	99	254	343	81	16	49	128	115
	1960-1	145	29	97	217	280	83	13	58	131	105

Regional variations in suicide rates

Durkheim¹ and other investigators have observed a positive correlation between the size of an urban community and its suicide rate. Stengel and Cook⁴ have shown that when various cities in the same country are considered, this rule is not of universal application. Comparing the suicide rates in the three industrial communities of Sheffield, Leeds and Burnley, they found the difference in the rates "to be related to differences in the age composition of the population and in other factors relevant to the incidence of suicide, especially social disorganisation and social mobility".

Table CXXVIII shows the suicide death rates per million persons living in conurbations, and urban and rural aggregates, 1955 to 1959 and 1960 to 1961.

Except for women aged 25-44 in 1960-61, suicide rates were lowest in the rural areas. The rates for young people aged 15-24 increased in the second period compared with the first in all the urban aggregates, but decreased slightly in rural areas. This increase was particularly marked for young men in the conurbations and large urban aggregates with populations of 100,000 and over. Very high rates at ages 65 and over were a feature of the conurbations and urban areas with populations of 50,000 and over. The over-all picture in the aggregates of areas is of an association between large populations and high suicide rates.

Table CXXIX. Suicide death rates per million living for certain years by sex in Standard Regions, England and Wales

	Males						Females					
	1950	1954	1956	1958	1960	1961	1950	1954	1956	1958	1960	1961
England and Wales	136	149	149	146	139	135	70.0	81.1	90.0	90.9	86.7	91.4
Standard Regions												
Northern	145	135	148	138	144	106	55.5	44.8	71.8	68.2	57.6	68.0
East and West Ridings ..	151	150	147	173	152	133	60.8	74.1	92.7	81.6	94.5	95.2
North Western	137	165	171	166	147	171	78.4	94.7	102	103	97.0	109
North Midland	142	145	140	142	116	118	70.6	82.8	83.5	75.2	83.8	78.0
Midland	127	156	142	144	115	124	70.7	85.5	93.2	83.2	79.7	87.5
Eastern	132	148	143	108	118	118	65.5	73.9	91.7	86.4	75.7	89.5
London and South Eastern	140	154	158	155	153	152	77.4	90.3	96.3	108	108	104
Southern	118	139	119	116	127	127	72.6	68.4	88.6	87.5	71.6	80.3
South Western	136	144	147	150	153	124	58.6	85.4	83.6	91.0	72.9	79.5
Wales I	111	112	111	118	120	106	61.9	71.9	60.3	67.2	51.3	64.0
Wales II	125	153	161	120	150	134	63.2	62.7	60.1	78.7	70.5	86.6

Taking the average of the rates for 1960 and 1961, two regions had male suicide rates exceeding 150 per million living, the North Western and London and the South Eastern (see Table CXXIX). The East and West Ridings and Wales II had the next highest rates. Lowest rates for males occurred in the North Midland and Eastern regions and in Wales I.

Female rates were also highest in the North Western region and in London and the South Eastern region, the East and West Ridings ranking third and the Midland region fourth. It is difficult to account for the relatively high rate of suicide for women in this region.

¹ See page 240.

⁴ Stengel, E. and Cook, Nancy, G. (1961). *J. Ment. Sci.*, 107. 1011-1019.

Table CXXX. Suicide: Crude death rates per million living in metropolitan and county boroughs, and ranking order, 1950 and 1960, England and Wales

County or metropolitan borough	1950			1960		
	Population	Death rate	Ranking	Population	Death rate	Ranking
Region I. Northern						
Carlisle	68,290	59	102	69,980	157	30
Darlington	85,550	105	56	83,660	167	28
Gateshead	115,500	95	74	108,560	138	43
Middlesbrough	145,500	96	72	154,560	91	86
Newcastle-on-Tyne	294,800	136	22	268,970	93	84
South Shields	109,400	119	34	108,600	138	43
Sunderland	178,100	112	48	188,000	80	98
Tynemouth	66,270	121	32	70,010	100	78
West Hartlepool	72,460	110	52	76,110	105	73
Region II. East and West						
Ridings						
Barnsley	75,780	66	101	75,450	239	6
Bradford	294,300	116	40	289,860	114	65
Dewsbury	53,140	113	47	53,460	112	68
Doncaster	80,930	86	82	85,300	176	24
Halifax	98,840	162	14	94,900	221	9
Huddersfield	129,600	193	7	129,130	178	22
Kingston-upon-Hull	302,100	159	15	302,400	139	42
Leeds	509,700	100	69	514,760	113	66
Rotherham	82,860	84	86	85,070	212	12
Sheffield	515,000	85	84	499,610	82	94
Wakefield	60,580	33	111	59,840	100	78
York	107,700	130	27	104,120	154	31
Region III. North Midland						
Derby	143,430	119	34	129,430	100	78
Grimsby	93,240	107	53	97,030	82	94
Leicester	287,520	104	59	273,370	124	57
Lincoln	69,900	86	82	73,730	109	70
Northampton	105,490	85	84	101,180	99	81
Nottingham	307,000	114	44	313,760	105	73
Region IV. Eastern						
Great Yarmouth	51,310	117	39	51,500	58	108
Ipswich	104,140	106	55	115,780	69	102
Norwich	119,700	125	28	117,700	144	39
Southend	152,400	79	92	160,120	169	27
Region V. London and South						
Eastern						
Battersea	117,700	102	67	107,120	131	48
Bermondsey	59,810	50	107	53,510	93	84
Bethnal Green	58,730	136	22	47,580	84	91
Brighton	157,800	184	11	160,860	137	45
Camberwell	178,900	89	80	175,020	97	82
Canterbury	27,080	111	50	30,560	131	48
Chelsea	52,490	152	18	49,140	366	1
Croydon	251,600	107	53	249,690	124	57
Deptford	76,580	118	36	69,330	101	76
Eastbourne	58,050	258	4	57,940	207	16
East Ham	121,900	90	78	109,160	82	94
Finsbury	35,810	84	86	33,710	148	36
Fulham	123,400	105	56	112,960	186	19
Greenwich	89,570	56	104	88,310	147	37

Table CXXX—continued

County or metropolitan borough	1950			1960		
	Population	Death rate	Ranking	Population	Death rate	Ranking
Region V. London and South Eastern—contd.						
Hackney	172,100	134	25	163,050	135	46
Hammersmith	119,200	50	107	108,290	83	92
Hampstead	97,400	287	1	98,080	275	4
Hastings	65,690	122	31	65,130	184	20
Holborn	25,930	270	2	21,000	333	2
Islington	238,200	92	76	222,940	130	51
Kensington	177,400	152	18	167,240	233	7
Lambeth	231,000	82	89	224,080	152	32
Lewisham	228,300	79	92	221,330	149	35
Paddington	130,600	199	6	113,350	212	12
Poplar	74,050	81	90	63,340	126	55
St. Marylebone	78,260	166	13	69,640	302	3
St. Pancras	141,300	120	33	127,710	125	56
Shoreditch	44,800	67	100	42,870	47	109
Southwark	97,080	124	30	88,690	226	8
Stepney	99,730	100	69	93,850	170	26
Stoke Newington	48,510	103	63	50,240	179	21
Wandsworth	333,800	156	17	338,800	151	34
West Ham	172,800	116	40	163,310	129	52
Westminster	105,100	257	5	92,940	215	10
Woolwich	149,000	101	68	145,470	62	103
Region VI. Southern						
Bournemouth	139,600	193	7	146,550	205	17
Oxford	108,200	92	76	104,490	115	63
Portsmouth	240,020	104	59	217,520	152	32
Reading	115,770	112	48	118,110	59	107
Southampton	180,800	105	56	201,790	144	39
Region VII. South Western						
Bath	77,040	104	59	81,460	147	37
Bristol	442,600	79	92	433,750	97	82
Exeter	77,260	104	59	77,450	116	62
Gloucester	67,890	103	63	68,620	131	48
Plymouth	208,960	53	106	216,470	129	52
Region VIII. Wales						
Cardiff	244,600	45	109	255,470	106	72
Merthyr Tydfil	60,600	83	88	59,230	101	76
Newport	107,300	103	63	104,580	19	111
Swansea	161,700	111	50	165,560	72	101
Region IX. Midland						
Birmingham	1,117,900	115	43	1,093,160	115	63
Burton-on-Trent	49,000	184	11	49,460	61	106
Coventry	256,800	125	28	291,000	103	75
Dudley	63,240	190	9	63,910	110	69
Smethwick	77,370	90	78	71,110	113	66
Stoke-on-Trent	275,800	116	40	270,200	81	97
Walsall	114,500	114	44	115,390	87	89
West Bromwich	87,910	80	91	93,780	128	54
Wolverhampton	162,100	68	99	145,160	62	103
Worcester	61,500	98	71	64,490	47	109

Table CXXX—*continued*

County or metropolitan borough	1950			1960		
	Population	Death rate	Ranking	Population	Death rate	Ranking
Region X. North Western						
Barrow	67,820	118	36	64,580	62	103
Birkenhead	143,150	70	97	144,280	90	88
Blackburn	111,500	135	24	105,330	171	25
Blackpool	149,600	187	10	143,530	167	28
Bolton	168,600	71	96	159,570	132	47
Bootle	70,240	114	44	82,580	109	70
Burnley	84,920	259	3	80,560	261	5
Bury	59,190	118	36	59,290	118	61
Chester	48,680	103	63	60,090	83	92
Liverpool	802,300	70	97	754,670	85	90
Manchester	704,500	95	74	665,590	120	59
Oldham	119,500	159	15	117,250	213	11
Preston	120,300	75	95	113,460	212	12
Rochdale	89,530	134	25	84,210	178	22
St. Helens	112,500	44	110	109,610	91	86
Salford	177,700	96	72	161,170	74	99
Southport	85,500	152	18	81,350	209	15
Stockport	142,110	56	104	141,440	120	59
Wallasey	102,510	137	21	103,450	203	18
Warrington	79,480	88	81	78,780	140	41
Wigan	84,950	59	102	80,950	74	99

Table CXXX shows the crude suicide death rates per million living for 111 metropolitan and county boroughs in 1950 and 1960, their national rankings and also the populations in those years. If the boroughs are ranked in order of population size in 1950, the sixteen largest (roughly those with 250,000 or more inhabitants) and a corresponding number of the smallest, had the following suicide rates and national ranking:

Largest populations

Population ranking	County or metropolitan borough	1950			1960		
		Population	Death rate	Ranking	Population	Death rate	Ranking
1	Birmingham	1,117,900	115	43	1,093,160	115	63
2	Liverpool	802,300	70	97	754,670	85	90
3	Manchester	704,500	95	74	665,590	120	59
4	Sheffield	515,000	85	84	499,610	82	94
5	Leeds	509,700	100	69	514,760	113	66
6	Bristol	442,600	79	92	433,750	97	82
7	Wandsworth	333,800	156	17	338,800	151	34
8	Nottingham	307,000	114	44	313,760	105	73
9	Kingston-upon-Hull ..	302,100	159	15	302,400	139	42
10	Newcastle-on-Tyne ..	294,800	136	22	268,970	93	84
11	Bradford	294,300	116	40	289,860	114	65
12	Leicester	287,520	104	59	273,370	124	57
13	Stoke-on-Trent	275,800	116	40	270,200	81	97
14	Coventry	256,800	125	28	291,000	103	75
15	Croydon	251,600	107	53	249,690	124	57
16	Cardiff	244,600	45	109	255,470	106	72

Smallest populations

1	Holborn	25,930	270	2	21,000	333	2
2	Canterbury	27,080	111	50	30,560	131	48
3	Finsbury	35,810	84	86	33,710	148	36
4	Shoreditch	44,800	67	100	42,870	47	109
5	Stoke Newington ..	48,510	103	63	50,240	179	21
6	Chester	48,680	103	63	60,090	83	92
7	Burton-on-Trent ..	49,000	184	11	49,460	61	106
8	Great Yarmouth ..	51,310	117	39	51,500	58	108
9	Chelsea	52,490	152	18	49,140	366	1
10	Dewsbury	53,140	113	47	53,460	112	68
11	Eastbourne	58,050	258	4	57,940	207	16
12	Bethnal Green ..	58,730	136	22	47,580	84	91
13	Bury	59,190	118	36	59,290	118	61
14	Bermondsey	59,810	50	107	53,510	93	84
15	Wakefield	60,580	33	111	59,840	100	78
16	Merthyr Tydfil ..	60,600	83	88	59,230	101	76

In the largest boroughs the rates in 1950 varied from 159 down to 45 and in 1960 from 151 down to 81. The corresponding rankings varied from 15 to 109 in 1950 and from 34 to 97 in 1960. The smallest boroughs had rates varying from 270 down to 33 in 1950 and from 366 down to 47 in 1960, with corresponding rankings varying from 2 to 111 and from 1 to 109. It is noteworthy that in 1960 places as different as Birmingham, Leeds, Bradford, Dewsbury and Bury should show very little difference in their suicide rates, while the similarity between the rates in Liverpool, Sheffield, Stoke-on-Trent, Chester and Bethnal Green is even more striking. These data show that size of population is not a determining factor in the dimension of the suicide rate

and support Stengel and Cook's contention that the explanation of the variations in these rates must be sought elsewhere. So far as size is concerned, the modern urban agglomerations are much larger than those which were investigated in the last century, and tend to split themselves up into neighbourhood units based on shops, churches, public transport and other amenities, so that it may well be that the size of these should be taken into account. It is evident also that, in some boroughs at least, there have been considerable variations in the suicide rates over the ten years considered. For example:

		1950	1960
Borough in which the rate has trebled	Barnsley ..	66	239
	Wakefield ..	33	100
Borough in which the rate has doubled	Carlisle ..	59	157
	Cardiff ..	45	106
	Chelsea ..	152	366
	Doncaster ..	86	176
	Greenwich ..	56	147
	Plymouth ..	53	129
	Preston ..	75	212
	Rotherham ..	84	212
	St. Helens ..	44	91
	Southend ..	79	169
Boroughs in which the rate is one-half	Stockport ..	56	120
	Gt. Yarmouth	117	58
	Worcester ..	98	47
Borough in which the rate is one-third	Burton-on-Trent	184	61
Borough in which the rate is one-fifth	Newport ..	103	19

The twenty boroughs with the highest suicide rates in 1950 and similarly for 1960 were listed. Places which appeared in the lists for both years were the seven metropolitan boroughs of Chelsea, Hampstead, Holborn, Kensington, Paddington, St. Marylebone and Westminster, the industrial towns of Burnley, Halifax and Oldham and the resort towns of Bournemouth, Eastbourne and Southport. Sainsbury⁵ found that in London suicides were living alone to a significantly greater degree than were the population at risk. Of the twenty-eight Metropolitan boroughs, the seven listed above as having high suicide rates had the following ranking order for their percentage of one person households at the 1951 Census⁶.

1.	Westminster	..	..	..	..	34.9 per cent
2.	Kensington	..	..	..	..	32.3 per cent
3.	Holborn	..	..	..	..	31.8 per cent
4.	St. Marylebone	..	..	..	..	31.5 per cent
5.	Chelsea	..	..	..	..	31.4 per cent
6.	Paddington	..	..	..	..	31.2 per cent
7.	Hampstead	..	..	..	..	28.6 per cent

⁵. Sainsbury, P. (1955). *Suicide in London*. Maudsley Monograph No. 1. Chapman and Hall. London.

⁶. General Register Office. *Census, 1951. County Report, London* H.M.S.O.

Table CXXXI. County Boroughs with highest suicide rates in 1950 and 1960, with their rankings for various indices, among the 157 largest towns in England and Wales

	Resorts						Textiles				Metal manufacturing	Ports	Industrial	Older residential		
	Blackpool	Bournemouth	Brighton	Eastbourne	Hastings	Southport	Burnley	Halifax	Huddersfield	Oldham	Preston	Dudley	Rotherham	Kingston upon Hull	Barnsley	Wallsley
Population structure																
Population ('000)	34	35	30	136	118	78	75	68	40	42	46	124	81	9	90	66
% aged 65 and over	11	5	10	4	3	7	34	30	44	64	90	132	111	121	134	38
Females per 1,000 males	12	3	13	5	4	6	47	31	66	60	66	127	46	93	152	27
Females per 1,000 males aged 25-44	17	3	20	5	7	4	71	95	116	67	132	139	142	97	157	24
% of females aged 20-24 married	118	129	106	136	62	149	18	48	53	11	53	74	4	22	4	117
Population change																
1931-51, total (%)	36	51	95	122	119	94	148	114	97	149	115	97	84	134	105	102
1931-51, births and deaths %	154	152	143	150	153	155	147	145	142	144	114	45	36	54	43	121
1931-51, balance, %	23	32	72	84	73	52	135	89	74	136	112	117	106	145	130	99
1951-58, (%)	102	87	54	79	106	113	137	120	85	110	125	46	54	68	77	63
% illegitimate births, 1951-58	24	4	1	12	9	41	24	4	67	55	63	152	113	49	79	75
1950-57	3	5	7	52	43	29	52	15	52	39	35	153	138	43	138	80
Households																
% in private households	153	154	133	150	148	136	62	94	94	70	62	12	54	83	78	38
% one-person households	30	5	6	12	3	8	22	13	24	35	45	135	126	51	111	55
% 6 or more persons	144	127	97	115	131	148	148	144	139	127	70	7	21	36	15	65
% 1-3 room dwellings	125	29	18	99	26	94	61	2	6	20	37	40	139	27	25	141
% in shared dwellings	60	40	31	32	47	29	153	154	151	148	110	101	121	130	145	47
Economic character																
Occupied persons %	141	154	144	150	156	147	5	47	52	1	7	29	102	109	79	142
% women in labour force	31	22	41	5	36	25	2	19	46	4	15	86	149	132	145	130
% in manufacturing	136	145	132	156	155	129	25	21	16	19	60	44	32	92	57	110
% in service industries	14	11	27	13	7	19	118	112	137	124	95	96	112	90	87	23
% in retail	14	5	20	6	8	9	114	109	128	105	96	84	93	81	31	7
% in finance, etc.	48	5	4	21	27	34	83	64	106	96	71	96	83	71	83	41
Per capita retail sales, 1950	23	2	27	5	53	33	85	56	53	80	35	80	72	104	47	144
Social Class																
% in Social Class I and II	36	21	46	27	34	18	111	73	73	130	128	126	140	123	150	37
% in Social Class IV and V	107	134	94	108	91	128	43	59	61	35	38	41	22	10	5	102
Health																
Infant mortality rate																
1950-52	42	76	57	153	112	49	22	57	96	14	42	30	24	10	30	57
1955-57	57	102	102	144	116	27	50	88	88	41	41	27	64	41	11	64
T.B. notification rate, 1956	121	38	99	146	138	135	66	61	106	150	111	15	140	53	89	91
Mortality rate, bronchitis 1957	68	142	108	154	135	120	39	62	71	3	22	11	45	30	18	94
Education																
% terminating aged under 15	103	111	104	114	112	117	40	77	59	11	21	5	18	32	15	130
% aged 15-24 in fulltime	27	23	47	26	45	22	119	88	63	135	135	156	131	139	126	30

Loneliness may be more closely related to desolation than to isolation; nevertheless the high proportions of one person households in these boroughs may be indicative of the presence of a large number of lonely people. Sainsbury also lays particular stress on the significance of mobility in relation to suicide, whether social or spatial mobility. This really implies that rootlessness is a contributory factor, and this is consistent with Durkheim's conception of anomie.

Excluding the metropolitan boroughs, for which indices are not given, the rankings of the remaining boroughs were compared according to certain of the variables given by Moser and Scott⁷ for the 157 largest towns in England and Wales. The variables selected were from the groups: population size and structure, population change, households and housing, economic character, social class, health and education. The results are shown in Table CXXXI.

In order of population size, the sixteen boroughs ranged from 9th to 136th. Size did not seem, therefore, to be a significant factor.

The six "resort" boroughs had the common characteristics of ranking:

- high, for the percentage of people aged 65 and over.
- high, for the number of females per 1,000 males.
- high, for the number of females per 1,000 males, aged 25-44.
- low, for the percentage of females aged 20-24 ever-married.

The implications for the suicide rates are that there was an excess of elderly people, who are known to have high suicide rates, and an excess of females, not only in old age but at the marriage ages of 25-44, who would therefore have no marriage partners. Another relevant factor is that the resort towns rank low for the percentage of persons in private households, high for the percentage of one-person households and, in the case of Bournemouth, Brighton and Hastings, for the percentage of one to three roomed dwellings. A further indication of social disorganisation is their high ranking for illegitimate births. All these deviations from the normal type of family life may help to constitute the condition of anomie described by Durkheim, with which he associated high suicide rates.

Economic factors are apparently not disadvantageous in these towns, since they have high proportions of persons engaged in finance, retail business and service industries and small proportions in manufacturing. They rank fairly high for their *per capita* retail sales but relatively low for the percentage of occupied persons, which in these places is more likely to be due to retirement or independent means than to unemployment. However, they have relatively high proportions of people in Social Classes I and II, who, as noted earlier in this chapter, are known to have high suicide rates.

In the remaining boroughs there was a less marked pattern of similarity than in the resorts. All except Dudley and Wallasey rank fairly high for the percentage of females aged 20-24 who have already married. The textile towns come in the medium range for their percentage of persons aged 65 and over, and also for the number of females per 1,000 males. Burnley, Oldham, Preston

⁷ Moser, C. A. and Scott, Wolf. 1961. *British Towns. Centre for Urban Studies. Report No. 2.* Oliver and Boyd. Edinburgh and London.

and Kingston-upon-Hull lost population during the period 1931-51, so also did Eastbourne and Hastings, but the other boroughs increased in population. The metal manufacturing towns rank low for illegitimacy. The textile towns rank fairly high for the proportion of women in the labour force, whereas Dudley, Rotherham, Hull and Barnsley do not have this alternative source of income which could be very useful when there is underemployment in the heavy industries. Except for Wallasey, all these towns are in the medium range for *per capita* retail sales, compared with the resort towns which rank high in this index.

Compared with the resort towns and Wallasey, however, the other boroughs rank high for mortality from bronchitis, and it may be that disabling chronic illness, with resulting inability to work, may have some influence on the suicide rate, especially as loss of income for a male is likely to involve loss of status in the family and a departure from his normal role.

Method of suicide

Table CXXXII, which gives the suicide rates at two-yearly intervals from 1912 to 1960, shows that domestic gas is the chief means of committing suicide used by both men and women.

Table CXXXII. Crude suicide rates per million living, according to the method used, 1912 to 1960, England and Wales

Year	Poisoning by						Hanging and strangulation	Drowning	Firearms and explosives	Cutting and piercing instruments	Jumping from high places	Other and unspecified means						
	Anal- gesics and soporifics		Domestic gases		Other solids and liquids													
	M	F	M	F	M	F							M	F	M	F	M	F
1912 ..	3	1	5	2	17	12	42	8	28	16	15	1	30	5	3	1	10	3
1914 ..	2	1	5	2	15	11	42	8	30	16	17	1	33	7	4	1	9	2
1916 ..	1	0	4	2	9	6	34	8	22	17	10	0	28	5	4	2	7	1
1918 ..	1	1	7	4	6	6	29	8	23	19	10	1	29	6	5	2	6	2
1920 ..	1	0	9	6	10	6	32	8	27	20	13	1	32	5	3	2	8	2
1922 ..	1	0	18	9	13	10	37	8	29	17	14	0	32	6	4	3	8	1
1924 ..	0	0	20	10	11	10	31	7	27	16	10	0	29	5	4	2	9	2
1926 ..	1	0	31	17	17	14	36	7	30	17	11	0	28	5	4	3	7	2
1928 ..	1	1	35	20	19	13	37	8	32	17	12	1	30	5	4	3	9	2
1930 ..	1	1	44	24	20	14	33	6	29	16	13	0	28	4	6	3	10	1
1932 ..	1	1	60	30	21	16	38	6	35	16	13	0	28	4	5	4	9	1
1934 ..	2	1	60	32	21	14	33	7	28	13	12	1	25	4	6	3	12	2
1936 ..	1	2	54	32	15	10	34	8	25	13	12	0	20	3	5	3	9	2
1938 ..	2	2	59	36	16	11	32	8	25	15	12	1	18	3	6	3	8	2
1940 ..	2	4	52	35	11	9	30	7	20	11	14	1	17	3	6	3	5	2
1942 ..	2	2	38	29	7	7	24	5	16	11	14	1	13	2	5	3	6	2
1944 ..	2	3	46	28	7	5	24	5	19	11	12	1	15	2	4	2	6	2
1946 ..	3	5	46	36	7	5	32	8	18	12	11	0	15	3	4	3	7	3
1948 ..	7	10	54	40	6	3	29	6	17	11	10	1	9	2	5	3	7	3
1950 ..	8	11	49	33	5	4	27	6	16	10	9	0	9	2	4	2	8	2
1952 ..	11	13	52	34	5	3	25	5	13	8	8	0	7	1	3	2	7	1
1954 ..	10	14	64	47	4	2	29	6	14	8	9	0	8	1	4	2	7	2
1956 ..	15	17	63	51	5	2	26	5	13	9	10	0	6	2	3	2	7	1
1958 ..	15	19	67	51	3	1	22	5	12	9	9	0	6	1	3	2	6	2
1960 ..	15	21	64	46	3	2	19	5	12	8	8	0	5	1	3	2	7	2

The increase in suicide death rates by this means (domestic gas) was continuous from about 1918 to 1934 for men and to 1938 for women. After some fluctuations during 1936 to 1950, the male rate rose to a peak value of 67 per million in 1958; the female rate also reached a peak value of 51 per million. Suicide by ingesting analgesics and soporifics has also increased, the death rate for males having trebled between 1946 and 1956, while for females there has been a steady increase in deaths from this cause, from 2 per million in 1942 to 21 per million in 1960. The drugs primarily involved in these suicides are barbiturates and aspirin.

There has been a decrease over the period studied in the death rates from the more violent methods of suicide. Thus for males the rate of suicidal death from hanging and strangulation has decreased from 42 per million in 1912 to 19 in 1960, by drowning from a peak value of 35 per million in 1932 to 12 in 1960, for the use of firearms from 17 in 1914 to 8 in 1960 and for the use of cutting and piercing instruments from 33 in 1914 to 5 in 1960. Although these methods of suicide are less commonly employed by women, there has been a noticeable decrease in their rates, also.

If suicide is the result of an impulse, as some contend, the high rates from gas poisoning may be partly due to its wide availability and it is not possible to restrict this, as could be done in the case of solids or liquids, by restricting their sale. The use of the more passive means of suicide, namely poisoning by gas or drugs, accords with the increase of suicide among older people.

Attempted suicides

It has already been stressed that statistics of attempted suicides are unreliable. Until the Suicide Act of 1961, attempted suicide in England and Wales was a criminal offence but it seems clear that most attempted suicides were never reported to the police. While a Ministry of Health memorandum⁸ in 1961 suggested that the annual number of attempted suicides might be about 30,000, the Home Office statistics of the number known to the police was 4,980 in 1959.

Durkheim¹ claimed that whereas suicide and attempted suicide were often discussed as if they were separate things, actual suicides must be regarded as those attempts which are successful. Stengel and Cook⁹ have sought to demonstrate that attempted suicide is quite a different problem from suicide itself. They have drawn attention to the fact that "self-injury in most attempted suicides, however genuine, is insufficient to bring about death, and the attempts are made in a setting which makes the intervention of others possible, probable and even inevitable". Stengel and Cook regard attempted suicide as a form of appeal to others for help in an intolerable situation. It is also regarded, they think as an ordeal, in the old sense of a trial by ordeal. If the attempt is unsuccessful, the result, for the time being at least, is accepted.

Table CXXXIII shows the percentage of effective suicides as measured by the ratio of verdicts of suicidal deaths to total cases during 1954-1960. Except in the year 1958, males aged 17-21 had the lowest ratio of effective suicides; in this age-group the "cry for help" might well be greatest as an

¹. See page 240.

⁸. Ministry of Health. *Attempted Suicide. National Health Service Memorandum H.M. (61) 94.*

⁹. Stengel, E. and Cook, N. G. (1958). *Attempted Suicide. Maudsley Monograph No. 4.* Chapman and Hall, London.

Table CXXXIII. The percentage of effective suicides as measured by the ratio Verdicts/(Verdicts and cases attempted)
1954 to 1960, England and Wales

	Males						Females							
	1954	1955	1956	1957	1958	1959	1960	1954	1955	1956	1957	1958	1959	1960
8 and under 14 ..	25	38	100	22	—	22	—	—	17	—	—	—	8	5
14 and under 17	30	24	24	23	14	22	23	4	1	5	7	5	3	8
17 and under 21	19	19	16	16	21	18	18	7	5	5	8	6	10	6
21 and under 30	26	27	27	25	26	28	28	19	13	14	14	17	16	18
30 and under 40	40	37	37	38	41	40	43	29	27	26	27	29	31	30
40 and under 50	59	56	57	55	57	55	56	42	42	44	44	44	46	47
50 and under 60	70	67	67	65	69	71	69	61	57	59	62	63	62	63
60 and over ..	72	70	72	71	74	74	76	67	67	68	71	73	73	73

Data from Home Office. *Criminal Statistics of England and Wales, 1954 to 1960*. London. H.M.S.O.

effort is made to wrestle with the various social and moral problems which beset young people. It will be seen from Table CXXXIII that the proportions of effective suicides for females above the ages of 21 are very similar to those for males who are ten years younger. This may be because females are more inclined to attempt suicide for emotional reasons than are males, and therefore are more likely to contrive a situation in which the attempt will be discovered while its effect is still reversible.

Old people, as has been shown above, have a greater predilection for gas poisoning as a means of taking their lives, and this is an agent much swifter in taking effect. This would indicate that older people are more purposeful in their suicidal attempts than younger ones.

MISCELLANEOUS

Corrected notifications and deaths from certain infectious diseases

Table CXXXIV gives details of some of the less common notifiable diseases. The only unusual notification of this kind was a non-fatal case of typhus fever.

Table CXXXIV. Corrected notifications and deaths assigned to a few uncommon infectious diseases, 1961, England and Wales

Notifications			
Disease (and ICD No.)	Administrative area of assignment	County	Number of cases
Cholera (043) .. { M F	— —	— —	— —
Plague (058) .. { M F	— —	— —	— —
Relapsing fever (071) { M F	— —	— —	— —
Smallpox (084) .. { M F	St. Pancras Met. B. —	London A.C. —	1 —
Typhus fever (100-108) { M F	Epsom and Ewell M.B. —	Surrey —	1 —
Malaria (contracted in England and Wales) (110-117) } M F	— —	— —	— —
Deaths			
Disease (and ICD No.)	Administrative area of assignment	County	Date of death
Cholera (043) .. { M F	— —	— —	— —
Brucellosis (044) .. { M F	— —	— —	— —
Diphtheria (055) .. {	M Birmingham C.B.	Warwickshire	11th February
	M West Bromwich C.B.	Staffordshire	5th July
	M Plympton St. Mary R.D.	Devon	23rd November
	F Camberwell Met. B.	London A.C.	7th January
	F Paddington Met. B.	London A.C.	6th February
	F Islington Met. B.	London A.C.	7th February
	F Ealing M.B.	Middlesex	8th February
	F Islington Met. B.	London A.C.	12th February
	F Blackburn C.B.	Lancashire	19th May
	F Neath M.B.	Glamorgan	22nd December

Table CXXXIV—continued

Deaths—continued

Disease (and ICD No.)	Administrative area of assignment	County	Date of death
Plague (058) .. { F	— —	— —	— —
Anthrax (062) .. { F	— —	— —	— —
Relapsing fever (071) { F	— —	— —	— —
Smallpox (084) .. { F	— —	— —	— —
Rabies (094) .. { F	— —	— —	— —
Typhus and other rickettsial diseases (100–108) { F	— —	— —	— —
Actinomycosis (132) { M M F	Paddington Met. B. Radcliffe M.B. —	London A.C. Lancashire —	20th August 10th October —

There were ten deaths from diphtheria compared with five in 1960; and fifty-one cases of the disease compared with forty-nine.

Table CXXXV. Corrected notifications of diphtheria, 1961, England and Wales

Administrative area of assignment	County	Number of cases	
		M	F
South East Derbyshire R.D.	Derbyshire	—	2
Plympton St. Mary R.D.	Devon	1	—
Margate M.B.	Kent	1	—
Huyton with Roby U.D.	Lancashire	1	—
Battersea Met. B.	London A.C.	1	2
Bermondsey Met. B.	London A.C.	2	1
Camberwell Met. B.	London A.C.	4	9
Islington Met. B.	London A.C.	—	4
Kensington Met. B.	London A.C.	1	—
Paddington Met. B.	London A.C.	—	1
St. Pancras Met. B.	London A.C.	1	1
Stoke Newington Met. B.	London A.C.	1	—
Tottenham M.B.	Middlesex	1	—
Shifnal R.D.	Shropshire	1	—
West Bromwich C.B.	Staffordshire	1	—
Willenhall U.D.	Staffordshire	—	3
Horsham U.D.	Sussex West	2	—
Birmingham C.B.	Warwickshire	1	1
Neath M.B.	Glamorgan	2	4
Neath R.D.	Glamorgan	—	1
Newport C.B.	Monmouthshire	—	1

Deaths from encephalitis secondary to infectious disease

There were seventy-seven deaths from infectious disease in which encephalitis was mentioned on the death certificate and details of these cases are given in Table CXXXVI. This compares with thirty-one such deaths in the previous year, a good part of the increase being due to the high prevalence of measles in 1961.

Table CXXXVI. Deaths from encephalitis certified as secondary to infectious disease, by underlying cause, sex and age, 1961, England and Wales

ICD No.	Cause of death	All deaths	Deaths from encephalitis secondary to infectious diseases											
			All ages	0-	1-	2-	3-	4-	5-9	10-14	15-24	25-44	45-64	65 and over
080	Acute poliomyelitis	44	1	—	—	1	—	—	—	—	—	—	—	—
083	Late effects of acute infectious encephalitis	15	—	—	—	—	—	—	—	—	—	—	—	—
085	Measles	48	1	—	—	—	—	—	—	—	—	—	1	—
086	Rubella	38	17	3	2	2	3	2	5	3	1	2	—	1
087	Chickenpox	79	18	2	1	1	2	2	2	3	1	1	—	—
088	Herpes zoster	73	1	—	—	—	—	—	—	—	—	—	—	—
089	Mumps	1	—	—	—	—	—	—	—	—	—	—	—	—
092	Infectious hepatitis	10	5	1	1	1	—	—	2	1	—	—	—	—
093	Glandular fever (infectious mononucleosis)	8	6	1	—	—	—	—	2	1	—	—	—	2
096	Other diseases attributable to viruses	18	2	1	—	—	—	—	2	1	—	—	—	3
344	Late effects of intracranial abscess or pyogenic infection	48	3	—	—	—	—	1	—	—	—	—	—	—
480	Influenza with pneumonia	6	4	1	—	—	—	—	1	1	—	—	—	1
483	Influenza with nervous manifestations, but without digestive or respiratory symptoms	7	1	—	—	—	—	—	—	—	—	—	—	—
526	Bronchiectasis	10	—	—	—	—	—	—	—	—	—	—	—	—
		2,167	1	—	—	—	—	—	—	—	—	—	—	—
		2,227	4	—	—	—	—	—	—	—	—	—	—	—
		7	2	—	—	—	—	—	—	—	—	—	—	—
		6	5	—	—	—	—	—	—	—	—	—	—	—
		1,079	1	—	—	—	—	—	—	—	—	—	—	—
		628	—	—	—	—	—	—	—	—	—	—	—	—
	Total	3,638	37	3	4	4	2	3	3	8	3	2	1	2
		3,278	40	4	4	2	2	3	5	5	5	2	4	2

Tetanus

Deaths from tetanus are assigned to ICD No. 061 if the condition follows a slight injury, or vaccination; if the injury is serious, death is assigned to the injury.

In 1961 there were twenty-four cases assigned directly to tetanus, and seventeen in which the tetanus was a complication of a serious injury.

Table CXXXVII. Deaths due to tetanus, by sex and age, showing cause of tetanus, 1961, England and Wales

Age	Sex	Cause of tetanus
(a) assigned to tetanus (ICD No. 061)		
1 year	M	Tetanus*
4 years	M	Perforated wound below left eye, fell on mint stalk
6 years	F	Tetanus*
9 years	M	Tetanus*
9 years	M	Tetanus*
10 years	M	Slight wound on left leg from stick thrown by another child
12 years	M	Tetanus*
18 years	M	Accidental bruising to lip
25 years	F	Tetanus*
27 years	M	Tetanus*
27 years	F	Tetanus*
39 years	M	Stepped on rusty nail on farm, puncture wound of left foot
51 years	F	Abrasion to right leg
52 years	M	Splinter wound to thumb, sustained whilst gardening
61 years	M	Splinter wound to finger, sustained whilst gardening
66 years	M	Tetanus*
67 years	F	Abrasion of right foot
68 years	F	Tetanus*
69 years	M	Clinical Tetanus
72 years	M	Tetanus*
72 years	F	Infection through bad toe nails
78 years	F	Fell downstairs at home, graze to left wrist
79 years	F	Injury to right leg
86 years	M	Puncture wound of right foot
(b) assigned elsewhere		
9 years	M	Lacerated wound on thigh, fall in garden
10 years	M	Cut on leg whilst playing on beach
13 years	M	Cut knee whilst playing rugby
15 years	M	Lacerated palm of right hand, fell on broken glass whilst playing on waste ground
16 years	M	Wound to right leg caused by colliding with car whilst riding motor cycle
19 years	M	Head wound caused by attack by youths
20 years	M	Laceration of left knee caused by fall
35 years	M	Cut finger whilst working on farm
38 years	M	Burn on ankle whilst smoking in bed
48 years	M	Malignant leg ulcer causing sore on calf
54 years	M	Laceration of leg caused by shot from humane killer
54 years	M	Ulceration of scrotum
56 years	M	Tetanus*
56 years	F	Laceration of right leg caused by fall in garden
60 years	M	Tetanus*
63 years	F	Leg wound caused by fall in garden
77 years	M	Tetanus*

*No cause stated.

Deaths following vaccination or other prophylactic inoculation

This section gives details of deaths classified to ICD Nos. E940–E942, vaccinia, post vaccinal encephalitis, and other complications of smallpox vaccination, and to ICD Nos. E943, E944, post-immunisation jaundice and hepatitis, and other complications of prophylactic inoculation.

In 1961 there were four deaths assigned to complications of vaccination against smallpox:

- (1) Female aged 14 months, certified as generalised vaccinia following vaccination.
- (2) Male aged 5 months, certified as encephalitis due to primary vaccination against smallpox.
- (3) Male aged 7 months, certified as generalised vaccinia following vaccination.
- (4) Male aged 6 months, certified as postvaccinal encephalitis.

There were four deaths assigned to complications of other prophylactic inoculations, one following injection of anti-tetanus toxin:

- (1) Male aged 34 years, certified as anaphylactic shock due to hypersensitivity to typhoid and paratyphoid A and B injection.
- (2) Male aged 17 years, certified as asphyxia due to anaphylactic shock due to sensitivity to anti-tetanus injection given for minor injury.
- (3) Male aged 10 months, certified as asphyxia due to convulsions following inoculation for whooping cough.
- (4) Female aged 5 years, certified as allergic encephalitis following polio immunisation.

Deaths connected with administration of anaesthetics

Table CXXXVIII gives an analysis by age, sex and cause of deaths in which anaesthesia was mentioned on the certificate. It should not be assumed that this includes all the deaths in which anaesthesia played a part or that the anaesthetic necessarily was an important factor in causing death. There were 323 deaths which is a small decrease in numbers compared with 1959 and 1960, the figures in those years being 414 and 344 respectively.

Table CXXXVIII. Deaths by cause, sex and age, connected with the administration of anaesthetics, 1961, England and Wales

ICD No.	Cause of death	All ages		0-		5-		15-		25-		35-		45-		55-		65 and over	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
020-029	Syphilis and its sequelae	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
140-205	Malignant neoplasms .. including neoplasms of lymphatic and hematopoietic tissues .. .	35	35	—	—	—	—	—	—	1	—	1	—	—	—	12	6	18	24
210-239	Benign neoplasms and neoplasms of unspecified nature .. .	4	7	—	—	—	—	1	—	1	—	—	—	—	—	—	—	1	4
250-254	Diseases of thyroid gland .. .	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300-309	Diabetes mellitus	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1
330-334	Psychoses	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
410-416	Vascular lesions affecting central nervous system	1	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
420-422	Chronic rheumatic heart disease ..	1	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440-447	Arteriosclerotic and degenerative heart disease	5	9	—	—	—	—	—	—	—	—	—	—	—	—	1	—	3	9
450-456	Hypertension without mention of heart	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500-502	Diseases of arteries	4	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	1
514	Bronchitis	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—
530-535	Deflected nasal septum	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—
540-541	Diseases of teeth and supporting structures	5	1	—	—	1	1	—	—	—	—	2	—	—	—	—	—	—	—
550-553	Ulcer of stomach and duodenum ..	13	3	—	—	—	—	—	—	—	—	3	—	—	—	6	2	4	1
560, 561, 570	Appendicitis	6	5	—	—	1	1	—	—	—	—	1	—	—	—	1	—	2	2
572	Intestinal obstruction and hernia ..	21	13	1	—	—	—	—	—	1	—	—	—	—	—	6	3	10	10
580-587	Chronic enteritis and ulcerative colitis	4	6	—	—	—	—	—	—	—	—	—	—	—	—	1	2	3	4
610	Diseases of liver, gallbladder and pancreas	7	6	1	—	—	—	—	—	—	—	1	1	—	—	1	—	3	5
631	Hyperplasia of prostate	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	—
640-689	Uterovaginal prolapse	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
720-749	Deliveries and complications of pregnancy, childbirth and the puerperium	—	9	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	—
750-759	Diseases of the bones and organs of movement	1	6	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Rem. 001-795	Congenital malformations .. .	24	15	3	3	2	—	1	1	1	—	1	—	—	—	—	—	—	—
E810-E835	All other diseases	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6
E900-E904	Motor vehicle accidents	3	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rem. E800-E999	Accidental falls	5	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	All other accidents and violence ..	167	156	8	5	6	2	4	5	8	8	11	12	20	10	37	23	73	91
	All causes	167	156	8	5	6	2	4	5	8	8	11	12	20	10	37	23	73	91

Therapeutic misadventures

Deaths analysed under this heading are based on secondary tabulations from death certificates since international coding practice classifies, where possible, according to the condition being treated.

The general trend in these deaths is illustrated in the following table:

Fatal misadventures due to:	Number of Deaths				
	1954-6 (Annual average)	1957-8 (Annual average)	1959	1960	1961
(i) adverse reaction to drug or therapy Table CXXXIX (page 274) ..	101	132	136	150	188
(ii) mistake in drug administered Table CXLI (page 280) ..	4	2	3	1	2
(iii) overdose of drug Table CXL (page 279)	96	100	127	117	117
(iv) accident in technique Table CXLII (page 280) .. .	30	54	68	59	110

It can be seen that there has been a very striking increase in the deaths ascribed to accidents of technique. There seems to be no very obvious explanation of this increase, which is spread over a number of causes, of which the most obvious is oesophagoscopy. Deaths due to this procedure have risen from seven in 1960 to fifteen in 1961. It is possible that the generally rather higher death rate in 1961 may have contributed to the increase over 1960 but this can only account for a part of the excess.

In the following tables the agents are as described by the coroner and no attempt has been made to amalgamate the synonymous terms.

Table CXXXIX. Fatal therapeutic misadventures due to adverse reaction to drug or therapy, 1961, England and Wales

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Actinomycin ..	1	Agranulocytosis	
Adrenaline ..	1	Pyelitis	Cardiac arrest
Anticoagulant ..	14		
	1	Acute haemorrhagic gastritis	Haematemesis, melaena
	1	Cerebral embolus	Cerebral haemorrhage
	2	Cerebral haemorrhage	Coronary thrombosis (1 case)
	1	Chronic anaemia	
	1	Haematemesis and melaena	Coronary occlusion (recurrent)
	1	Haematoma ileum	Paralytic ileus
	1	Haemoptysis	Massive pulmonary embolism
	1	Haemorrhage	Bronchopneumonia
	1	Haemorrhage in intestines	Pulmonary embolism
	1	Left cerebellar haemorrhage	
	2	Retroperitoneal haemorrhage	Pulmonary oedema (1 case)
	1	Subdural haematoma	Cerebral haemorrhage

Table CXXXIX—continued

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Arsenic	1	Serum hepatitis	Liver failure
Aspirin	2		
	1	Acute gastric ulcer	Haematemesis
	1	Erosion of the stomach	Toxaemia
Azosalphidine ..	1	Agranulocytosis	Generalised infection
Barbiturate, streptomycin, tetracycline, sulpho- namides and chlortetracycline	1		
Butazolidin ..	4	Aplastic anaemia	Uraemia
	2	Aplastic anaemia	Cerebral haemorrhage (1 case) Terminal pneumonia (1 case)
	1	Cerebral haemorrhage	
	1	Thrombocytopenia and agranulocytosis	Massive gastro-intestinal haemorrhage
Carbrital ..	1	Oedema of larynx and gullet	
Carbromal ..	1	Hypersensitivity	Cardiac syncope
Cavodil	1	Hepatic necrosis	
Chloramphanicol	8		
	1	Agranulocytosis	Bronchopneumonia
	6	Aplastic anaemia	Gastric and intestinal haemorrhage (1 case) Gastro-intestinal haemorrhage (1 case) Multiple haemorrhage (1 case)
	1	Peritonitis and aplastic anaemia	
Chlorbetamide ..	1	Aplastic anaemia	Agranulocytic angina
Chloromycetin ..	6	Aplastic anaemia	Intracerebral haemorrhage (1 case) Uraemia (1 case)
Chlorotrianisene	1	Aplastic anaemia	
Chlorpromazine—	4		
	1	Hypertensive cardiac failure	
	1	Jaundice	Renal failure
	1	Liver damage	
	1	Obstructive jaundice	Liver failure
Cogentin therapy	1	Paralytic ileus	
Corticosteroids	21		
	1	Acute adrenal failure	
	1	Acute septicaemia (streptococcal)	
	1	Acute suprarenal failure	
	1	Adrenal failure	Dehydration and circulatory collapse Peritonitis Heart failure Adrenal insufficiency
	1	Atrophy of adrenals	
	1	Cardiovascular degeneration	
	1	Chronic bronchitis and emphysema	Adrenal failure
	1	Circulatory collapse	
	1	Duodenal ulceration	
	1	Hypopituitary coma	
	2	Intestinal haemorrhage	Peripheral circulatory failure (1 case) Pustular psoriasis (1 case) Intestinal haemorrhage Heart failure Bronchopneumonia
	1	Intestinal perforation	
	1	Lowered resistance	
	1	Oedema	
	1	Pancreatitis and peritonitis	
	1	Perforation of colon	

Table CXXXIX—continued

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Corticosteroids —cont.	1 1 1 1	Perforation of small intestine Septicaemia Steroid diabetes mellitus Suprarenal insufficiency	Hodgkin's disease Coronary thrombosis
Cortisone ..	4 1 2 1	Acute adrenal failure Adrenal failure Cortisone collapse	Heart failure (1 case)
Cyclophosphamide	1	Aplastic anaemia	
Dapsone ..	1	Agranulocytosis	Acute bronchiolitis
Dindevan ..	4 1 1 1 1	Acute subdural haemorrhage Bilateral adrenal haemorrhage Ex-foliative dermatitis Retroperitoneal intestinal and adrenal haemorrhages	Cerebral compression Bronchopneumonia
Diuretics ..	1	Chronic nephritis	
Electro-convulsive therapy ..	3 1 1 1	Coronary athroma and coronary insufficiency Fractures to humerus and vertebrae Shock	Ventricle fibrillation Bronchopneumonia
Glyceryl trinitrate, digoxin and mersalyl ..	1	Aplastic anaemia	Cardiac failure
Gold ..	1	Bronchopneumonia	
Gold and Butazolidin ..	1	Aplastic anaemia	
Hypaque ..	1	Idiosyncrasy	Anaphylactic shock
Insulin ..	1	Insulin coma	Occlusion of the coronary arteries
Kemadrin ..	1	Acute dilation of stomach	Acute cardiac and pulmonary insufficiency
Largactil, Nardil and Dramamine	1	Toxic hepatitis	Cholemia
Lignocaine ..	1	Hypersensitivity	Acute cardiac failure and cerebral anoxia
Majeptil ..	1	Collapse of lungs	
Marsilid ..	1	Toxic hepatitis	Liver failure
Mersalyl ..	1	Renal tubular disease	Nephrotic syndrome
Methotrexate	1	Pancytopenia	Bronchopneumonia
Methylthiouracil	1	Agranulocytosis	Bronchopneumonia
Nardil ..	1	Subacute necrosis of liver	
Neoarsphenamine	1	Severe aplastic anaemia	
Nitrogen Mustard therapy ..	1	Cerebral haemorrhage	
Nitrous oxide ..	1	Cardiomegaly	Heart failure
Norethandrolone therapy ..	1	Toxic hepatitis	Hepatic failure
Para-aminosalicylic acid ..	1	Hepatic cirrhosis	Hepatic failure
Paraldehyde ..	1	Vagal inhibition	
Penicillin ..	2 1 1	Anaphylactic shock Bronchopneumonia	
Penicillin and Welldorm ..	1	Steven Johnson Syndrome	

Table CXXXIX—*continued*

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Phenobarbitone	2		
	1	Chronic aplastic anaemia	Bronchopneumonia
	1	Toxic epidermal necrolysis	
Phenylbutazone	1	Aplastic anaemia	Cerebral haemorrhage
Phenytoin ..	1	Megaloblastic anaemia	Uraemia
Pipadone ..	1	Acute tracheobronchitis	
Prednisolone ..	1	Perforated peptic ulcer	
Prednisolone and Salazopyrin ..	1	Ulcerative colitis	Agranulocytosis
Prednisone ..	1	Acute pulmonary oedema	
Promazine and Sparine ..	1	Agranulocytosis	
Radiation ..	44		
	1	Anaemia <i>c</i> oedema	Uraemia
	1	Atrophy of ileum	Cachexia
	1	Cancer of back	Bronchopneumonia
	1	Carcinomatosis and uraemia	
	1	Cerebral thrombosis	
	1	Enterocolitis	Circulatory failure
	1	Epithelioma of skin	Epithelioma involving ileum
	1	Fibrosis	General peritonitis
	3	Fibrosis of lung	Bronchopneumonia (2 cases)
			Congestive cardiac failure (1 case)
	3	Fibrosis of lungs	Heart failure (1 case)
			Terminal bronchopneumonia (1 case)
	1	Gangrenous back	Pulmonary insufficiency
	1	Haematuria	Right bronchopneumonia
	1	Hypostatic pneumonia	
	1	Irradiation ileitis	Bronchopneumonia
	1	Irradiation necrosis, right antral cavity	Carcinoma right antrum with metastases
	1	Irradiation of kidneys	Uraemia
	1	Irradiation ulcer	Acute rectal haemorrhage
	1	Lymphatic block	Gross oedema of the lower limbs
	1	Necrosis of bladder	Uraemia
	1	Necrosis of bowel	Uraemia
	1	Necrosis of brain	Cancerous cachexia
	1	Perforated ulcer	Gastro-intestinal haemorrhage
	1	Post irradiation	Malabsorption syndrome
	1	Post irradiation fibrosis	Bronchopneumonia
	1	Post radiation diarrhoea	Left cerebral artery thrombosis
	1	Post radiation necrosis cyst	Raised intracranial pressure
	1	Post radiation pneumonitis	Bronchopneumonia
	1	Progressive paraplegia	Squamous carcinoma
	2	Pulmonary fibrosis	Pulmonary heart disease (1 case)
			Respiratory failure (1 case)
	1	Pyelonephritis and myocarditis	
	1	Radionecrosis of chest	Toxaemia
	1	Radiotherapy burns	Carcinoma of breast
	1	Rectovaginal fistula	Cachexia
	1	Renal failure	Congestive cardiac failure
	1	Renal necrosis	Uraemia
	1	Severe anaemia	Cardiac failure
	1	Toxic anaemia	Bronchopneumonia
	1	Uraemia, radiological lesion right kidney	Bronchopneumonia
	1	X-ray necrosis, right shoulder	Bronchial haemorrhage

Table CXXXIX—continued

Drug or therapy	No. of cases	Nature of adverse reaction	Terminal complication if different from preceding column
Radiation, Butazolidin and prednisone ..	1	Aplastic anaemia	Pleurisy
Radio-phosphorous ..	1	Aplastic anaemia	Acute bronchopneumonia
Radium	1	Perforated irradiation ulcer of rectum	Peritonitis
Sinthrome ..	1	Haematemesis and melaena	
Sparine	1	Toxaemia and agranulocytosis	Heart failure
Stilboestrol ..	1	Cardiac failure	
Streptomycin and I.N.A.H. ..	1	Aplastic anaemia	Subarachnoid haemorrhage
Succinylcholine Chloride ..	1	Apnoea	Post operative pulmonary collapse
Terramycin ..	1	Diarrhoea	Respiratory obstruction
Thiopentone ..	1	Bronchospasm	Anoxia and cardiac arrest
Thiotepa ..	3		
	1	Acute pulmonary oedema	
	1	Agranulocytosis	Intestinal obstruction
	1	Severe aplastic anaemia	
Thiotepa and P.32	1	Aplastic anaemia	
Thiotepa, prednisone and Endoxana	1	Agranulocytosis	Lymphosarcoma
Thiotepa testosterone and stilboestrol ..	1	Aplastic anaemia	Cancer of breast
Transfusions ..	5		
	1	Extreme shock and vasomotor collapse	Acute fulminating toxaemia
	1	Haemosiderosis	Uraemia
	1	Homologous serum jaundice	Hepatic failure
	1	Serum hepatitis	Hepatic coma
	1	Serum sickness	Influenzal bronchopneumonia
Urethane ..	1	Aplastic anaemia	
Urografin ..	1	Idiosyncrasy	Shock
Warfarin sodium	1	Subdural haemorrhage	
Other drugs and therapy ..	4		
Anaesthesia ..	1	Cardiac arrest	
Fluid replacement therapy ..	1	Pulmonary oedema	
Radio opaque substance ..	1	Vasovagal attack	
Therapy unknown ..	1	Toxic nephritis and hepatitis	
Total cases ..	188		

Table CXL. Fatal therapeutic misadventures due to overdose of drug, 1961, England and Wales

Drug or combination of drugs	Cases			Cases		
	Medically administered	Self administered	Administration not stated	Medically administered	Self administered	Administration not stated
Amylobarbitone	—	1	1	—	1	—
Amylobarbitone and alcohol ..	—	1	—	—	—	1
Amylobarbitone and meprobamate	—	1	—	—	—	—
Amylobarbitone and quinalbarbitone	—	1	—	—	—	—
Amytal	—	2	1	—	1	—
Aspirin	—	7	2	—	1	—
Aspirin, phenacetin and codeine	—	—	1	—	—	1
Atabrin and aspirin	—	—	2	—	—	—
Barbital	—	—	1	—	—	1
Barbitone	—	1	—	—	—	1
Barbiturate	—	6	—	—	2	4
Barbiturate and alcohol	—	4	—	—	—	1
Butobarbitone	—	1	6	—	—	1
Carbital	—	3	—	—	—	1
Carbital and alcohol	—	1	1	—	1	1
Chloral hydrate	—	1	—	—	1	2
Digitalis	—	—	—	—	—	—
Digoxin	—	—	2	—	—	—
Doriden and alcohol	—	1	—	—	1	—
Ethobral	—	1	—	—	1	1
Guanidine	—	—	—	—	7	5
Hypnotic drug	—	—	1	—	1	—
Imipramine	—	—	1	—	4	2
Insulin	—	—	1	—	1	—
Lignocaine hydrochloride	—	—	1	—	2	—
Medinal	1	—	—	—	—	—
Morphine and barbiturate	—	1	1	—	2	4
Nardil	—	1	—	—	—	—
Nembutal	—	2	—	—	—	—
Nembutal and alcohol	—	—	—	—	—	—
Nembutal, Largactil and Melsedin	—	—	—	—	—	—
Paraldehyde and Sodium Amytal	—	—	—	—	—	—
Parselin	—	—	—	—	—	—
Pentobarbitone	—	—	—	—	—	—
Pentobarbitone Sodium and alcohol	—	—	—	—	—	—
Phenelzine	—	—	—	—	—	—
Phenobarbitone	—	—	—	—	—	—
Phenobarbitone and cyclobarbitone	—	—	—	—	2	4
Phenothiazine and meprobamate	—	—	—	—	—	—
Pipadone	—	—	—	—	—	—
Salicylate	—	—	—	—	—	—
Salicylate and alcohol	—	—	—	—	1	2
Seconal	—	—	—	—	—	—
Seconal and alcohol	—	—	2	—	—	—
Sodium amyllobarbitone	—	—	—	—	1	—
Sodium Amytal	—	—	—	—	7	5
Sodium Amytal and Largactil ..	—	—	—	—	1	—
Soneryl	—	—	1	—	4	2
Soneryl and alcohol	—	—	1	—	1	—
Tuinal	—	—	1	—	2	4
Tuinal and alcohol	—	—	—	—	—	—
Total	1	63	53	1	63	53

Table CXLI. Fatal therapeutic misadventures due to mistake in drug administration, 1961, England and Wales

Therapeutic misadventure associated with	Nature of misadventure
	<i>Medically administered (2 cases)</i>
Adrenaline	Adrenaline injection given instead of Xylocaine with Adrenaline.
Surgical spirit	Intravenous injection of surgical spirit given in error.

Table CXLII. Fatal therapeutic misadventures due to accident in technique, 1961, England and Wales

Therapeutic misadventure associated with	Nature of misadventure
Air embolism .. 8 cases	<p>Air embolism and haemorrhage due to ruptured inferior vena cava due to nephrectomy.</p> <p>Air embolism complicating encephalogram.</p> <p>Air embolism due to air entering cannulated right radial artery following operation for cardiac atrial septal defect. Pulmonary hypertension and chronic bronchitis.</p> <p>Air embolism during cannulation of the infected vena cava.</p> <p>Air embolism following removal of meningioma from cerebral cortex.</p> <p>Air embolism occurring accidentally in the course of intravenous transfusion.</p> <p>Air embolism, surgical emphysema following opening of the lung.</p> <p>Foreign body (rubber cork) in bronchi when using inhalant.</p> <p>Cardiac failure due to air embolism due to repair of large ventral hernia.</p>
Anaesthesia .. 3 cases	<p>Acute or chronic heart failure, senile ischaemic myocardial fibrosis aggravated by pulmonary embolism, death accelerated by the pressure of an endotracheal tube accidentally left in place following an operation for fracture of the neck of left femur.</p> <p>Asphyxia due to laryngeal spasms, attempted intubation during anaesthesia, appendix abscess.</p> <p>Cardiac arrest, coronary arterial atheroma, acute lignocaine poisoning, injected for operation for insertion of tube into bladder.</p>
Apparatus .. 7 cases	<p>Acute bilateral bronchopneumonia due to tetanus due to penetrating wound of the right leg. While receiving artificial respiration became disconnected from the respiration pump.</p> <p>Anoxia from respiratory obstruction following operation for repairing faecal fistula; endotracheal tube pulled out by patient.</p> <p>Asphyxia due to respiratory obstruction accidentally caused by the dislodgement of a tracheotomy tube.</p> <p>Cerebral degeneration, anoxia, displacement of endotracheal tube at the conclusion of operation for dissection of tonsils.</p>

Table CXLII—continued

Therapeutic misadventure associated with	Nature of misadventure
Apparatus—continued	<p>Occlusion of thecal-peritoneal C.S.F. by-pass tube upon chronic hydrocephalus. Surgical drainage tube fitted, this became blocked and caused death.</p> <p>Prolonged hyperthermia caused when a premature-baby incubator overheated.</p> <p>Pulmonary oedema, heart failure, operation for stone in ureter. Tracheotomy tube slipped out.</p>
Enema 3 cases	<p>Perforation of rectum by barium enema, ulcerative colitis. Peritonitis, colon perforated by enema nozzle while washing out the bowel</p> <p>Primary (neurogenic) shock, administration of an enema.</p>
Infection 2 cases	<p>Dilation of urethral stricture, blood infection, meningitis. Peritonitis and bronchopneumonia. Gas gangrene, appendicectomy.</p>
Injection and intravenous therapy 2 cases	<p>Multiple pulmonary infarct due to thrombosis of superficial vein of arm as a sequel to intravenous therapy for aniline poisoning caused by his occupation.</p> <p>Pulmonary embolus, deep vein thrombosis, occurred in leg in which patient had intravenous therapy.</p>
Needling 8 cases	<p>Biliary peritonitis due to escape of bile following liver biopsy, liver puncture with needle.</p> <p>Haemopericardium due to perforation of the heart whilst undergoing sternal puncture.</p> <p>Haemopericardium from rupture of superficial vessels in the heart wall as a result of a prick during the surgical process of draining fluid from the heart sac.</p> <p>Haemopericardium, needle puncture right ventricle, operation for pericardial effusion.</p> <p>Haemorrhage from rupture of the lung during aspiration of pleural effusion with a needle.</p> <p>Intra peritoneal haemorrhage following needle biopsy of the liver carried out by a competent person.</p> <p>Pulmonary haemorrhage due to therapeutic aspiration, pericardium and chest. Puncture of lung.</p> <p>Subarachnoid haemorrhage following cisternal puncture during the investigation of a suspected spinal tumour.</p>
Operative 41 cases	<p>Respiratory obstruction, haematoma in the neck, carotid arteriography.</p> <p>Haemorrhage, bronchial biopsy. Death occurred whilst under anaesthetic.</p> <p>Haemorrhage due to bronchial biopsy for benign chondroma of lung.</p> <p>Intra peritoneal haemorrhage following liver biopsy.</p> <p>Intra peritoneal haemorrhage, liver biopsy.</p> <p>Left ventricular failure, massive pulmonary collapse. Pleural effusion operation of bronchial biopsy.</p>
Cardiac catheterisation	<p>Haemopericardium due to perforation of left atrium: diagnostic cardiac catheterisation.</p>

Table CXLII—*continued*

Therapeutic misadventure associated with	Nature of misadventure
Operative—<i>continued</i>	
Craniotomy	Post-operative haemorrhage following cardiac puncture in the course of operative cardiac arrest during craniotomy for removal of a cerebral glioma.
Cystoscopy	Post-operative pneumonia, clinical peritonitis, ruptured bladder following cystoscopy.
Laparotomy	Pulmonary embolism, laparotomy, mitral incompetence, congestive cardiac failure.
Oesophagoscopy ..	Acute mediastinitis, perforation of oesophagus following oesophagoscopy
	Bronchopneumonia, perforation of oesophagus insertion of Porges tube.
	Bronchopneumonia, pyo-pneumothorax due to the perforation in the oesophagus following an oesophagoscopy.
	Cardiac failure, instrumental rupture of oesophagus. Carcinoma of oesophagus.
	Circulatory collapse, perforation of the stomach by tube inserted for oesophageal stricture.
	Empyema due to perforation of hiatus hernia during introduction of a Souttars tube for relief of oesophageal obstruction by the hernia.
	Left empyema, perforation of oesophagus following a dilatation of a stricture.
	Mediastinitis, traumatic perforation of oesophagus following oesophagoscopy.
	Perforation of lower oesophagus, passage of a bougie, achalasia of oesophagus; pulmonary embolus.
	Pneumothorax, pulmonary collapse, oesophageal perforation; oesophagoscopy, multiple pulmonary embolus.
	Pulmonary collapse following perforation of oesophagus accidentally caused during oesophagoscopy.
	Pulmonary embolism, pyrothorax, perforation of oesophagus during oesophagoscopy for hiatus hernia.
	Pyothorax due to perforation of carcinoma of oesophagus, oesophagoscopy.
	Right pulmonary collapse, left and right bronchopneumonia, oesophagus was ruptured during oesophagoscopy.
	Ruptured oesophagus, oesophagoscopy in the investigation of dysphagia.
Pharyngoscopy ..	Cardiac failure, tension pneumothorax following traumatic perforation of oesophagus pharyngoscopy.
Tracheotomy	Arterial haemorrhage from innominate artery, erosion by tracheotomy tube (misplaced). Tracheotomy (twice) for respiratory tract infection.
Valvotomy	Haemorrhage due to rupture of the right ventricle from cardiac massage during valvotomy for mitral stenosis.
	Loss of blood and shock due to disintegration of auricle wall during valvotomy for mitral stenosis.
Miscellaneous	Abdominal haemorrhage following exploration of lung, death due to haemorrhage from liver following accidental penetration thereof.
	Acute intrathoracic haemorrhage due to laceration of superficial pulmonary vessels during operation for attempted repair of left ventricular aneurysm; the residue of previous transventricular pulmonary valvotomy for tetralogy of Fallot.
	Bronchopneumonia, acute retention of urine, urethral stricture, traumatic indwelling catheter.
	Bronchopneumonia and renal failure due to haemorrhage following tear of urethra during the passing of a catheter.

Table CXLII—continued

Therapeutic misadventure associated with	Nature of misadventure
Operative—continued ..	
Miscellaneous— continued	Cardiac failure due to peritonitis due to perforation of the oesophagus due to operation for stenosis of the oesophagus due to corrosive poisoning due to drinking ammonia. General peritonitis due to a perforation of the bladder caused by the insertion of a catheter. Haemorrhage from left iliac vein during operation for removal of cancer of the bowel. Haemorrhage from the iliac vein at operation. Haemorrhage into pleura and left lung, simultaneous rupture of both right main bronchus and right pulmonary artery during surgery for carcinoma of the right upper lobe. Intra abdominal haemorrhage due to perforation of inferior vena cava during spinal operation for removal of degenerate intervertebral disc. Peripheral failure due to peritonitis due to perforation of rectum following operation. Peritonitis, small bowel perforation caused when trying to separate dense fibrous adhesions.
Post operative 19 cases	
Appendicectomy ..	Haemorrhage from the appendicular artery following appendicectomy.
Colostomy	Peritonitis due to leakage from colostomy as a consequence of resection of rectum for carcinoma.
Gastrectomy	Empyema and peritonitis following total gastrectomy for haemorrhage from peptic ulcer of stomach, sutures gave way.
Ileostomy	Pulmonary embolism, deep vein thrombosis, ulcerative colitis, therapeutic colitis.
Laparotomy	Bronchopneumonia, resuturing of abdomen, laparotomy to exclude intestinal obstruction.
Oesophagectomy ..	Bronchopneumonia, partial disruption of suture line, oesophagectomy.
Ovarian cystectomy ..	Abdominal haemorrhage from pedicle following right ovarian cystectomy for simple cyst. Bleeding from a vein associated with division of pedicle.
Pneumonectomy ..	Post-operative haemorrhage due to slipped ligature following pneumonectomy for carcinoma.
Pulmonectomy ..	Pulmonary haemorrhage due to the slipping of a ligature following left pneumonectomy for bronchogenic carcinoma.
Splenectomy and nephrectomy ..	Internal haemorrhage from splenic artery following splenectomy and nephrectomy, ligature in an artery became loose.
Thoractomy	Haemorrhage from pulmonary artery, ligature on major blood vessel slipped, thoractomy due to carcinoma of lung.
Tonsillectomy ..	Collapse of the lung due to respiratory obstruction due to inhalation of blood due to haemorrhage from tonsillectomy.
Miscellaneous ..	Abdominal aneurysm, aortic leakage from lower end of graft inserted at operation, shock and cardiac failure. Acute anuria (uraemia), biliary peritonitis, stricture of the bile duct, cystic duct ligature blown off. Acute blood loss due to haemorrhage from left pulmonary artery due to surgical removal of left lung for treatment of bronchial carcinoma, slipped ligature. Haemorrhage, bleeding from a branch of the uterine artery, which had slipped from its ligature after operation.

Table CXLII—continued

Therapeutic misadventure associated with	Nature of misadventure
Post operative—continued	
Miscellaneous— continued	<p>Hypostatic pneumonia due to calculus, cholecystitis, slipped ligature with operation of cholecystitis.</p> <p>Rupture of duodenal suture line, removal of stones from common bile duct.</p> <p>Toxaemia, emphysema, leakage from oesophageal suture line.</p>
Packs, swabs, etc. ..	Bronchopneumonia and empyema due to subphrenic abscess due to foreign body (gauze pack) after gastrectomy.
Transfusion	Adrenal haemorrhage and shock following transfusion of infected blood.
Ventriculography ..	Hypotension and circulatory failure following ventriculography for introduction of guide for thalamectomy.
Other misadventures .. 14 cases	<p>Acute dilation of the stomach, post operative. Operated upon for a suspected perforation.</p> <p>Anoxia and shock due to acute haemorrhage as a result of an ineffective umbilical ligature.</p> <p>Bronchopneumonia due to a state of unconsciousness due to cerebral anoxia resulting from cardiac arrest during operation for removal of a simple adenoma of the thyroid gland.</p> <p>Cardiac arrest due to ventricular fibrillation occurring during colporrhaphy. Pyelitis following injection of adrenaline during the course of operation.</p> <p>Cardiac failure following gastrectomy and biliary destruction due to ligation of common bile duct.</p> <p>Collapse of lung, prostatectomy, pre-operative anaesthetic.</p> <p>Fat embolism following upon a manipulation of joints in a case of rheumatoid arthritis.</p> <p>Oxygen embolism originating from the operation site in the vagina.</p> <p>Pulmonary collapse following chronic bronchitis during operation for amputation of right leg, and administration of anaesthetics.</p> <p>Arterial embolism, right leg.</p> <p>Purulent bronchitis and cystitis due to cerebral anoxia due to cardiac arrest following operation for infertility.</p> <p>Respiratory failure, haemorrhage into air passages, haemorrhagic infarct of lung as a result of pulmonary embolus. Radiological examination of the lung, bronchogram.</p> <p>Respiratory failure while being drip fed; aspiration of milk into lungs. Bronchial obstruction, inhalation of vomit.</p> <p>Surgical shock, extravasation of urine, perforation of bladder following operation for treatment of tumour of the bladder.</p> <p>Ventricular fibrillation following hypothermia for ligation of congenital cerebral aneurysm.</p>
Total ..	110 cases

Table CXLIII. Deaths by cause and sex according to type of institution, etc., in which they occurred, 1961, England and Wales

Cause of death	ICD No.	Total deaths		Psychiatric hospitals				Other hospitals and institutions for the care of the sick				Other institutions		At deceased person's own home		In other private houses and other places	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
All causes		280,782	270,970	6,989	9,933	145	262	129,975	117,998	4,627	9,730	6,917	10,706	116,432	110,584	15,697	11,757
Infective and parasitic diseases	001-138	3,674	1,965	147	102	1	1	2,278	1,225	23	26	32	28	1,112	534	81	49
Tuberculosis of respiratory system	001-008	2,240	762	73	34	—	—	1,344	471	10	8	12	2	755	231	36	16
Tuberculosis, other forms	010-019	166	166	5	8	—	—	136	124	1	4	—	—	26	26	3	4
Syphilis and its sequelae	020-029	556	344	36	22	—	—	293	150	4	5	13	9	181	144	29	14
Gonococcal infection and other venereal diseases	030-039	14	—	—	—	—	—	5	—	—	—	—	—	9	—	—	—
Infectious diseases commonly arising in the intestinal tract	040-049	34	34	9	12	—	—	22	16	—	—	1	—	2	6	—	—
Other bacterial diseases	050-064	169	144	1	5	—	—	133	111	4	2	—	2	26	20	5	4
Spirochaetal diseases, except syphilis	070-074	14	—	—	—	—	—	13	—	—	—	—	—	2	—	—	—
Diseases attributable to viruses	080-096	415	448	23	20	1	1	288	307	4	7	6	15	85	90	8	8
Syphilis and other rickettsial diseases	100-108	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	110-114	6	—	—	—	—	—	5	—	—	—	—	—	—	—	—	—
Other infective and parasitic diseases	120-138	60	67	—	1	—	—	40	46	—	—	—	—	20	17	—	3
Neoplasms	140-239	54,045	47,188	578	567	7	8	28,101	22,945	1,424	2,221	553	773	22,626	18,730	756	1,944
Malignant neoplasm of buccal cavity and pharynx	140-148	1,070	645	9	4	—	1	501	324	61	32	21	18	459	237	19	29
Malignant neoplasm of digestive organs and peritoneum	150-159	19,030	18,330	212	231	4	2	9,192	8,254	521	831	230	342	8,593	7,764	278	906
Malignant neoplasm of respiratory system	160-165	20,289	3,652	176	55	1	1	10,429	2,047	401	139	140	30	8,850	1,241	292	139
Malignant neoplasm of breast and genito-urinary organs	170-181	6,975	18,261	70	198	1	3	3,733	8,288	265	995	121	300	2,695	7,811	90	666
Malignant neoplasm of other and unspecified sites	190-199	3,108	3,060	66	45	1	—	1,751	1,780	110	132	27	52	1,108	947	45	104
Neoplasms of lymphatic and haematopoietic tissues	200-205	2,969	2,526	16	18	—	—	2,045	1,745	58	64	10	21	811	601	29	77
Benign neoplasm	210-229	327	479	13	10	—	1	244	338	2	18	2	5	64	93	2	14
Neoplasm of unspecified nature	230-239	277	235	16	6	—	—	206	169	6	10	2	5	46	36	1	9
Allergic, endocrine system, metabolic, and nutritional diseases	240-289	2,303	4,364	50	122	—	3	1,371	2,479	30	71	31	109	752	1,439	69	141
Allergic disorders	240-245	566	719	8	19	—	—	218	291	9	10	5	12	299	343	27	44
Diseases of thyroid gland	250-254	90	665	2	19	—	2	51	360	—	—	1	13	31	239	5	20
Diabetes mellitus	260	1,331	2,538	30	69	—	1	878	1,593	19	46	23	77	355	690	26	62
Diseases of other endocrine glands	270-277	119	144	6	9	—	—	84	86	2	2	1	3	20	37	6	7
Avitaminoses, and other metabolic diseases	280-289	197	298	4	6	—	—	140	149	—	1	1	4	47	130	5	8

Table CXLIII—continued

Cause of death	ICD No.	Total deaths		Psychiatric hospitals				Other hospitals and institutions for the care of the sick				Other institutions		At deceased person's own home		In other private houses and other places	
		M	F	N.H.S.		Other than N.H.S.		N.H.S.		Other than N.H.S.		M	F	M	F	M	F
				M	F	M	F	M	F	M	F						
Diseases of the blood and blood-forming organs	290-299	764	1,344	15	27	—	2	511	792	13	33	18	30	201	427	6	33
Mental, psychoneurotic, and personality disorders	300-326	392	682	134	210	6	8	146	333	5	21	44	14	53	90	4	6
Psychoses	300-309	305	572	109	191	2	5	117	283	4	18	44	13	26	59	3	3
Psychoneurotic disorders	310-318	11	33	3	3	—	1	4	18	—	2	—	—	4	7	—	2
Disorders of character, behaviour, and intelligence	320-326	76	77	22	16	4	2	25	32	1	1	—	1	23	24	1	1
Diseases of the nervous system and sense organs	330-398	33,893	49,019	930	1,183	29	63	17,128	22,722	765	2,331	1,470	2,502	12,914	18,660	657	1,558
Vascular lesions affecting central nervous system	330-334	31,160	45,863	746	987	27	52	15,577	20,896	715	2,176	1,345	2,348	12,143	17,901	607	1,503
Inflammatory diseases of central nervous system	340-345	690	847	10	23	—	1	496	593	16	31	21	30	139	162	8	7
Other diseases of central nervous system	350-357	1,871	2,161	172	173	2	10	916	1,116	34	122	101	122	606	573	40	45
Diseases of nerves and peripheral ganglia	360-369	52	33	—	—	—	—	47	25	—	2	1	1	3	5	1	—
Inflammatory diseases of eye	370-379	2	—	—	—	—	—	16	39	—	—	—	—	5	—	—	—
Other diseases and conditions of eye	380-389	24	43	1	—	—	—	75	53	—	—	2	1	—	3	—	—
Diseases of ear and mastoid process	390-398	94	72	1	—	—	—	—	—	—	—	—	—	17	16	1	3
Diseases of the circulatory system	400-468	102,364	102,394	3,004	4,700	61	130	33,925	32,837	1,390	3,529	2,847	4,852	52,857	51,079	8,280	5,267
Rheumatic fever	400-402	56	47	1	1	—	—	38	29	1	—	—	—	13	14	2	3
Chronic rheumatic heart disease	410-416	2,580	4,892	42	96	1	—	1,232	2,397	24	77	32	92	1,070	2,047	179	183
Arteriosclerotic and degenerative heart disease	420-422	77,639	68,368	2,307	3,548	40	94	22,441	18,682	1,011	2,441	2,143	3,537	42,363	36,202	7,334	3,864
Other diseases of heart	430-434	6,429	8,232	135	162	2	3	3,212	3,715	97	249	189	339	2,681	3,443	163	311
Hypertensive heart disease	440-443	4,495	6,730	198	329	—	3	1,533	2,049	56	245	188	291	2,581	3,495	189	318
Other hypertensive disease	444-447	2,897	3,372	79	143	1	3	1,245	1,177	37	103	72	122	2,302	2,639	161	168
Diseases of arteries	450-456	6,713	8,356	181	301	16	26	3,060	3,243	147	370	239	443	2,851	3,644	219	329
Diseases of veins and other diseases of circulatory system	460-468	1,555	2,397	61	120	1	1	1,174	1,545	17	44	23	38	246	575	33	74
Diseases of the respiratory system	470-527	43,372	29,732	1,528	2,033	28	36	20,575	13,235	494	734	1,399	1,545	18,389	11,281	959	868
Acute upper respiratory infections	480-475	65	71	5	5	1	—	26	75	—	—	—	2	27	36	6	1
Influenza	480-483	3,487	3,615	114	170	2	4	799	736	36	93	226	345	2,223	2,125	87	142
Pneumonia	490-493	14,087	15,188	1,048	1,603	21	27	4,801	8,434	201	420	428	730	3,497	3,665	291	309
Bronchitis	500-502	22,203	9,160	281	187	3	3	9,479	3,262	222	161	667	399	11,065	4,780	486	368
Other diseases of respiratory system	510-527	3,530	1,698	80	68	1	2	1,670	778	35	58	78	69	1,577	4,675	89	48

Diseases of the digestive system	530-587	7,951	7,488	131	151	3	1	6,392	5,712	117	156	73	104	1,149	1,254	86	110
Diseases of buccal cavity and oesophagus	530-539	105	152	6	12	—	—	78	113	—	4	3	5	15	16	3	2
Diseases of the stomach and duodenum	540-545	3,109	1,550	47	20	1	—	2,512	1,156	26	32	35	31	457	286	31	25
Appendicitis	550-553	361	284	2	—	—	—	324	246	10	7	1	1	23	28	1	2
Hernia of abdominal cavity	560, 561	747	827	16	18	—	—	579	662	10	13	9	7	125	113	8	14
Other diseases of intestines and peritoneum	570-578	2,012	2,585	32	64	2	1	1,613	1,979	35	49	18	30	288	420	24	42
Diseases of liver, gallbladder and pancreas	580-587	1,617	2,090	28	37	—	—	1,286	1,556	36	51	7	30	241	391	19	25
Diseases of the genito-urinary system	590-637	6,551	3,849	152	129	3	2	4,747	2,575	124	103	101	65	1,353	896	71	79
Nephritis and nephrosis	590-594	1,866	1,632	52	47	1	—	1,174	933	28	43	21	25	560	539	30	44
Other diseases of urinary system	600-609	1,823	2,035	54	78	1	1	1,145	1,504	31	56	24	39	256	326	12	31
Diseases of male genital organs	610-617	3,162	—	46	—	1	—	2,428	—	65	—	56	—	537	—	29	—
Diseases of breast, ovary, Fallopian tube and parametrium	620-626	—	38	—	—	—	—	—	30	—	—	—	—	—	8	—	—
Diseases of uterus and other female genital organs	630-637	—	144	—	4	—	—	—	108	—	4	—	1	—	23	—	4
Deliveries and complications of pregnancy, childbirth, and the puerperium	640-689	—	274	—	3	—	—	—	212	—	2	—	2	—	47	—	8
Complications of pregnancy	640-649	—	82	—	—	—	—	—	61	—	—	—	—	—	19	—	2
Abortion	650-652	—	54	—	—	—	—	—	40	—	—	—	—	—	10	—	4
Delivery without mention of complication	660	—	7	—	—	—	—	—	7	—	—	—	—	—	—	—	—
Delivery with specified complication	670-678	—	88	—	—	—	—	—	75	—	1	—	1	—	10	—	1
Complications of the puerperium	680-689	—	43	—	3	—	—	—	29	—	1	—	1	—	8	—	1
Diseases of the skin and cellular tissue	690-716	197	315	5	22	—	—	150	201	2	9	9	11	30	67	1	5
Infections of skin and subcutaneous tissue	690-698	81	93	3	14	—	—	62	57	1	2	5	5	9	15	1	—
Other diseases of skin and subcutaneous tissue	700-716	116	222	2	8	—	—	88	144	1	7	4	6	21	52	—	5
Diseases of the bones and organs of movement	720-749	669	1,370	11	33	—	—	374	717	9	75	26	56	240	460	9	29
Arthritis and rheumatism, except rheumatic fever	720-727	353	1,053	5	16	—	—	202	524	4	67	18	53	121	374	3	19
Osteomyelitis and other diseases of bone and joint	730-738	167	206	4	11	—	—	109	134	1	3	6	2	46	49	1	7
Other diseases of musculoskeletal system	740-749	149	111	2	6	—	—	63	59	4	5	2	1	73	37	5	3
Congenital malformations	750-759	2,671	2,525	43	30	1	5	2,159	2,010	33	38	10	9	368	383	57	50
Certain diseases of early infancy	760-776	5,828	3,925	4	9	—	—	5,367	3,606	76	51	4	5	329	217	48	37
Birth injuries, asphyxia, and infections of the newborn	760-769	3,537	2,211	3	7	—	—	3,207	1,985	48	33	3	5	238	156	38	25
Other diseases peculiar to early infancy	770-776	2,291	1,714	1	2	—	—	2,160	1,621	28	18	1	—	91	61	10	12
Symptoms, senility, and ill-defined conditions	780-795	2,454	4,876	82	300	2	2	807	1,331	36	232	237	529	1,205	2,339	85	143
Symptoms referable to systems or organs	780-789	106	113	2	—	—	—	65	55	4	3	2	4	28	41	5	10
Senility and ill-defined diseases	790-795	2,348	4,763	80	300	2	—	742	1,276	32	229	235	525	1,177	2,298	80	133

Table CXLIII—continued

Cause of death	ICD No.	Total deaths		Psychiatric hospitals				Other hospitals and institutions for the care of the sick				Other institutions		At deceased person's own home		In other private houses and other places	
		M	F	N.H.S.		Other than N.H.S.		N.H.S.		Other than N.H.S.		M	F	M	F	M	F
				M	F	M	F	M	F	M	F						
Accidents, poisonings, and violence (external cause)	E800-E999	13,654	9,660	175	312	4	1	5,944	5,066	86	98	63	72	2,854	2,681	4,528	1,430
Railway accidents	E800-E802	254	29	1	—	—	—	68	8	—	—	—	—	—	—	185	21
Motor vehicle traffic accidents	E810-E825	4,669	1,875	21	7	—	—	2,874	1,239	38	13	2	—	26	26	1,708	590
Motor vehicle non-traffic accidents	E830-E835	84	—	—	—	—	—	41	4	—	—	—	—	3	—	40	2
Other road vehicle accidents	E840-E845	98	46	—	1	—	—	69	36	1	1	1	—	4	1	23	7
Water transport accidents	E850-E858	172	13	—	—	—	—	25	2	—	—	—	—	—	—	147	11
Aircraft accidents	E860-E866	35	2	—	—	—	—	3	1	2	—	—	—	3	—	27	1
Accidental poisoning by solid and liquid substances	E870-E888	223	241	1	4	—	—	99	108	1	2	—	—	93	110	29	17
Accidental poisoning by gases and vapours	E890-E895	444	570	2	—	—	—	65	63	—	—	2	2	315	454	60	51
Accidental falls	E900-E904	1,889	3,487	69	220	1	1	1,454	2,755	21	66	20	56	155	321	169	68
Other accidents	E910-E936	2,430	1,071	46	51	1	—	664	438	13	9	9	7	457	322	1,260	244
Complications due to non-therapeutic medical and surgical procedures	E940-E946	7	2	—	—	—	—	5	2	—	—	—	—	1	—	1	—
Therapeutic misadventure and late complications of therapeutic procedures	E950-E959	12	8	2	—	—	—	8	7	1	1	—	—	—	—	1	—
Late effects of injury and poisoning	E960-E965	30	30	3	2	—	—	88	16	3	2	2	—	41	9	5	1
Suicide and self-inflicted injury	E970-E979	3,025	2,175	29	26	2	—	421	377	5	4	21	7	1,711	1,374	836	387
Homicide and injury purposely inflicted by other persons (not in war)	E980-E985	150	105	1	1	—	—	60	10	1	—	6	—	45	64	37	30
Injury resulting from operations of war	E990-E999	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Table CXLIV. Deaths by cause and sex, according to method of certification, 1961, England and Wales

Cause of death	ICD No.	Total deaths				Coroner				Certifying medical practitioner								Uncertified	
		M		F		Inquest held		Post-mortem without inquest		After post-mortem		Operation mentioned on death certificate		Other examination mentioned on death certificate		No examination mentioned			
		M	F	M	F	With post-mortem	No post-mortem	M	F	M	F	M	F	M	F	M	F		
All causes		230,782	270,970	12,363	7,010	3,847	3,014	36,873	24,368	25,413	20,530	4,338	4,228	149	153	196,963	211,069	836	598
Tuberculosis of respiratory system ..	001-008	2,240	762	129	5	17	4	341	105	246	100	24	22	—	—	1,480	525	3	1
Tuberculosis, other forms ..	010-019	166	166	4	1	—	—	28	17	46	61	1	2	—	—	87	83	—	—
Syphilis and its sequelae ..	020-029	556	344	3	—	—	—	147	132	97	63	5	3	1	2	302	143	—	—
Typhoid fever ..	040	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
Dysentery, all forms ..	045-048	15	19	—	—	—	—	2	2	3	9	—	—	—	—	10	8	—	—
Scarlet fever and streptococcal sore throat ..	050, 051	2	9	—	—	—	—	—	1	1	3	—	—	—	—	1	5	—	—
Whooping cough ..	056	17	10	—	—	—	—	3	1	4	1	—	—	—	—	10	8	—	—
Meningococcal infections ..	057	65	65	2	—	—	—	22	29	21	16	—	—	—	—	20	19	—	—
Acute poliomyelitis ..	080	44	15	2	—	—	—	5	5	9	5	—	—	—	—	28	4	—	—
Measles ..	085	79	73	1	—	—	—	12	10	16	13	—	—	—	—	49	50	—	—
Typhus and other rickettsial diseases ..	100-108	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria ..	110-117	6	—	—	—	—	—	2	—	2	—	—	—	—	—	2	—	—	—
All other diseases classified as infective and parasitic ..	Rem. 001-138	483	502	33	16	12	4	89	80	92	139	1	—	—	—	253	263	3	—
Malignant neoplasms ..	140-205	53,441	46,474	272	59	60	10	2,180	1,314	5,899	4,089	2,497	3,047	120	124	42,390	37,823	23	8
Benign and unspecified neoplasms ..	210-239	604	714	7	18	3	2	98	133	163	169	28	65	1	7	304	319	—	1
Diabetes mellitus ..	260	1,331	2,538	6	8	—	3	84	117	160	305	36	32	—	—	1,043	2,069	2	4
Anaemias ..	290-293	573	1,136	5	3	—	2	22	47	109	163	1	1	—	—	435	919	—	—
Vascular lesions affecting central nervous system ..	330-334	31,160	45,863	114	36	21	11	2,045	2,751	1,507	1,817	10	17	—	2	27,417	41,176	46	53
Non-meningococcal meningitis ..	340	208	164	2	—	—	—	35	23	75	65	—	—	—	1	96	69	—	—
Rheumatic fever ..	400-402	56	47	5	—	—	—	18	15	18	11	—	—	—	—	14	21	—	—
Chronic rheumatic heart disease ..	410-416	2,580	4,892	33	—	13	2	7	522	674	333	616	—	—	1	1,657	3,507	8	6
Atherosclerotic and degenerative heart disease ..	420-422	77,639	68,368	472	65	100	16	19,396	9,324	3,701	2,661	27	11	11	—	53,359	55,930	573	361
Other diseases of heart ..	430-434	6,439	8,232	27	8	4	4	320	251	398	392	3	6	—	—	5,661	7,551	16	20
Hypertension with heart disease ..	440-443	4,495	6,730	19	6	3	1	582	554	279	262	—	—	—	—	3,606	5,893	6	13
Hypertension without mention of heart ..	444-447	2,897	3,372	21	10	—	2	608	654	254	212	—	—	—	—	2,009	2,484	5	6
Influenza ..	480-483	3,487	3,615	16	3	1	1	297	217	121	78	—	—	—	—	3,044	3,314	7	4
Pneumonia ..	490-493	14,087	15,188	72	35	24	12	2,182	1,656	1,707	1,348	6	4	1	1	10,082	12,115	13	17
Bronchitis ..	500-502	22,203	9,160	297	17	39	4	2,124	893	1,368	524	3	2	—	—	18,347	7,716	25	4

Table CXLIV—continued

Cause of death	ICD No.	Total deaths				Coroner				Certifying medical practitioner								Uncertified													
						Inquest held				Post-mortem without inquest				After post-mortem						Operation mentioned on death certificate				Other examination mentioned on death certificate				No examination mentioned			
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F								
Ulcer of stomach and duodenum	540-541	2,950	1,455	49	8	6	1	572	300	884	420	316	92	2	1	1,119	633	2	—												
Appendicitis	550-553	361	284	7	7	2	2	76	52	113	78	54	48	—	—	109	96	—	1												
Intestinal obstruction and hernia	560, 561, 570	1,525	1,664	39	23	7	3	379	378	406	442	202	209	1	—	489	606	2	3												
Gastritis, duodenitis, enteritis, and colitis, except diarrhoea of the newborn	543, 571, 572	1,036	1,546	19	15	3	—	203	259	284	392	69	82	1	1	457	796	—	1												
Cirrhosis of liver	581	737	633	34	14	11	4	118	67	166	178	5	6	—	—	403	363	—	1												
Nephritis and nephrosis	590-594	1,866	1,632	10	5	3	—	125	124	290	253	3	—	1	—	1,432	1,245	2	5												
Hyperplasia of prostate	610	3,075	—	23	—	5	—	198	—	469	—	587	—	1	—	1,790	—	2	—												
Complications of pregnancy, childbirth, and the puerperium	640-689	—	274	—	48	—	4	—	124	—	59	—	5	—	—	—	34	—	—												
Congenital malformations	750-759	2,671	2,525	18	16	5	1	430	368	911	760	57	61	1	1	1,247	1,316	2	2												
Birth injuries, postnatal asphyxia and atelectasis	760-762	2,906	1,784	21	17	3	3	152	100	1,449	858	—	—	—	—	1,274	802	7	4												
Infections of the newborn	763-768	503	342	4	3	3	—	85	60	262	170	—	—	—	—	147	109	2	—												
Other diseases peculiar to early infancy, and immaturity unqualified	769-776	2,419	1,799	11	2	—	1	50	24	561	416	1	3	—	—	1,788	1,348	8	5												
Senility without mention of psychosis, ill-defined and unknown causes	780-795	2,454	4,876	43	26	7	7	22	57	25	38	—	2	1	—	2,336	4,725	20	21												
All other diseases	Rem. 140-795	19,761	24,038	624	187	109	40	3,148	3,284	2,928	3,322	375	426	5	9	12,544	16,742	28	28												
Motor vehicle accidents	E810-E835	4,753	1,881	3,704	1,473	1,032	403	5	2	3	1	—	—	—	—	4	1	5	1												
All other accidents	E800-E802 E840-E962 E963	5,675	5,498	3,807	3,075	1,575	1,974	131	153	32	21	3	12	—	—	103	239	24	24												
Suicide and self-inflicted injury	E970-E979	3,025	2,176	2,256	1,709	756	460	10	6	—	—	—	—	—	—	2	—	1	1												
Homicide and operations of war	E964-E965 E980-E999	201	105	152	81	31	24	5	—	—	—	—	—	—	—	13	—	—	—												

Live births, stillbirths and stillbirth rates by age and parity of mother and place of confinement

In England and Wales in 1961 there were 811,281 live births and 15,727 stillbirths. The tables that follow give details of the distribution of these births by place of confinement, age and parity of mother.

The places of confinement as shown in Tables CXLV to CL are grouped as follows:

N.H.S. hospital, i.e. hospitals and homes under the National Health Service, except mental hospitals;

Other hospital, which are mainly maternity homes not under the National Health Service;

At home, i.e. at the usual place of residence of the mother;

Other places of confinement which include all mental institutions, homes for unmarried mothers, remand homes, reception centres, private houses (other than the mother's usual residence), etc.

A set of tables is available for reference at the General Register Office showing numbers of live and still births with a breakdown as in Tables CXLV and CL for individual county boroughs and administrative counties within England and Wales. A copy of these tables, or of a table for a particular area, can also be obtained from the General Register Office on payment.

Table CXLV. Births by place of confinement, 1961, England and Wales

Place of confinement	Live births	Stillbirths	Total births	Total births per cent by place of confinement*	Stillbirth rate per 1,000 total births*
N.H.S. hospital ..	502,312	12,962	515,274	62·3 (61·3)	25·2 (26·3)
Other hospital ..	26,901	267	27,168	3·3 (3·4)	9·0 (9·9)
At home	265,676	2,294	267,970	32·4 (33·2)	8·6 (9·1)
Other	16,392	204	16,596	2·0 (2·1)	12·3 (12·5)
Total ..	811,281	15,727	827,008	100·0	19·0 (19·8)

* The figures in brackets are the corresponding figures for 1960.

Table CXLVI. Live births by age and parity* of mother and place of confinement, 1961, England and Wales

Age-group	Parity of mother									
	0			1-3			4 and over			Total
	N.H.S. hospital	Other hospital	At home	N.H.S. hospital	Other hospital	At home	N.H.S. hospital	Other hospital	At home	
All ages	263,934	11,517	45,559	204,149	14,324	191,384	34,229	1,060	28,733	502,312
Under 25	156,347	6,713	27,317	52,812	3,416	50,925	807	33	825	209,966
25-34	93,323	4,341	16,201	117,515	8,939	120,063	16,947	591	16,903	227,785
35 and over	13,985	447	1,913	33,755	1,967	20,332	16,465	436	10,993	64,205
Not stated	279	16	128	67	2	64	10	—	12	356
										18
										204
										16,392
										265,676
										10,162
										79,067
										10,157
										153,167
										5,743
										477
										33,238
										15

* Parity in this instance means the number of previous liveborn children.

Table CXLVII. Stillbirths by age and parity* of mother and place of confinement, 1961, England and Wales

Age-group	Parity of mother									
	0			1-3			4 and over			Total
	N.H.S. hospital	Other hospital	At home	N.H.S. hospital	Other hospital	At home	N.H.S. hospital	Other hospital	At home	
All ages	6,237	135	601	5,264	109	1,331	1,461	23	362	12,962
Under 25	3,180	65	318	985	24	282	24	1	6	4,189
25-34	2,433	55	215	2,966	60	755	606	12	163	6,005
35 and over	589	14	52	1,296	25	291	828	10	192	2,713
Not stated	35	1	16	17	—	3	3	—	1	55
										1
										20
										267
										2,294
										90
										606
										1,133
										56
										22
										49
										535
										20
										32

* Parity in this instance means the number of previous liveborn children.

Table CXLVIII. Percentage distribution of births for each place of confinement within each age and parity* group, 1961, England and Wales

Age-group	Parity of mother									
	0			1-3			4 and over			
	N.H.S. hospital	Other hospital	At home	N.H.S. hospital	Other hospital	At home	N.H.S. hospital	Other hospital	At home	Other
All ages	80	4	14	2	49	3	46	2	54	62
Under 25	80	3	14	3	48	3	46	2	48	69
25-34	81	4	14	1	47	4	47	2	49	58
35 and over	85	3	11	1	60	3	36	2	59	65
Not stated	61	3	28	8	54	1	43	2	50	58

* Parity in this instance means the number of previous liveborn children.

Table CXLVIX. Stillbirth rates per 1,000 total births, by age and parity* of mother and place of confinement, 1961, England and Wales

Age-group	Parity of mother									
	0			1-3			4 and over			
	N.H.S. hospital	Other hospital	At home	N.H.S. hospital	Other hospital	At home	N.H.S. hospital	Other hospital	At home	Other
All ages	23	12	13	15	25	8	7	9	41	25
Under 25	20	10	12	11	18	7	6	6	29	21
25-34	25	13	13	13	25	7	6	8	35	29
35 and over	40	30	26	29	37	13	14	45	48	20
Not stated	111	59	111	682	202	—	45	667	231	22
										—
										77
										17
										53
										89
										681

* Parity in this instance means the number of previous liveborn children.

Table CL. Stillbirth rates per 1,000 total births, by parity* of mother and place of confinement, 1961, England and Wales, standard regions and Wales

Area	Parity of mother																	
	0				1-3				4 and over				Total					
	N.H.S. hospital	Other hospital	At home	Total	N.H.S. hospital	Other hospital	At home	Total	N.H.S. hospital	Other hospital	At home	Total	N.H.S. hospital	Other hospital	At home	Total		
ENGLAND AND WALES	23	12	13	15	21	25	8	7	9	16	41	21	12	25	10	9	12	19
Standard regions:																		
Northern	24	14	16	10	22	30	7	9	6	19	54	11	15	28	10	11	8	22
East and West Ridings	27	5	13	10	23	26	6	6	9	16	41	—	15	36	28	6	9	20
North Western	25	10	16	13	24	27	5	7	7	17	47	19	12	77	31	8	11	21
North Midland	25	9	15	12	22	30	8	8	2	17	37	—	10	21	23	7	8	20
Midland	25	17	13	18	22	27	6	8	9	16	47	27	13	21	30	9	14	20
Eastern	22	9	10	12	18	29	8	6	11	15	44	24	16	43	30	7	12	17
London and South Eastern	19	14	12	30	19	20	9	5	16	14	32	33	12	—	25	7	23	17
Southern	22	11	9	17	19	20	8	6	22	13	36	30	7	—	24	11	18	16
South Western	23	11	14	11	21	23	9	8	8	16	34	12	8	—	23	9	9	18
Wales (including Monmouthshire)	26	24	18	13	24	28	9	9	4	20	38	—	16	—	29	16	8	22
Wales I (South East)	27	23	15	15	24	32	7	9	5	21	36	—	20	—	29	15	12	23
Wales II (remainder)	24	32	33	—	25	21	26	9	—	17	41	—	3	—	28	24	11	21

* Parity in this instance means the number of previous liveborn children.

ADVISORY COMMITTEE ON MEDICAL NOMENCLATURE AND STATISTICS

Report dated (March 1963) on the work of the Committee for 1960-1962

Introduction

This is the sixth report on the work of the Committee. A list of members of the Committee and of the Sub-committees is given at the end of the report. Professor W. Melville Arnott took over the chairmanship of the Committee in 1960 following the death of Sir Ernest Rock Carling, who had served as chairman since the inception of the Committee in 1948. During the three year period covered by the report the Committee met twice. The following paragraphs set forth the principal matters considered by the Committee.

Medical Certification of Cause of Death

Progress in implementing their recommendation that efforts should be made to get further information in cases where post-mortem findings became available after completion of the medical certificate of cause of death was kept under review by the Committee. The introduction of a revised certificate, which conformed with the Committee's recommendations, was arranged for the 1st January 1963.

Registration of Causes of Stillbirth

The Committee provided advice in connection with the introduction of the registration of causes of stillbirth in England and Wales on the 1st October 1960. The Committee, noting the importance of post-mortem examination in securing accurate information on the causes of stillbirth, suggested that consideration should be given to possible ways of encouraging post-mortem examinations of stillbirths. The Committee also remarked upon the high proportion of stillbirth certificates signed by midwives instead of by doctors and made some suggestions for reducing the proportion. By the end of 1962 the proportion of midwife certifications had fallen from 37 per cent in the final quarter of 1960 to 14 per cent in the September quarter of 1962.

Instruction in Certification of Causes of Death

During the period the Committee discussed the quality of certification of causes of death and considered a number of measures which could be taken for the better instruction not only of medical students but also of established doctors.

National Epidemiology

Suggestions in the medical press for the study of national epidemiology were discussed by the Committee. The Committee noted that the General Register Office contemplated a pilot study for the establishment of an index of hospital patients in the Oxford Region, and agreed to await further developments.

Eighth Revision of International Classification

In preparation for the Eighth Revision of the International Statistical Classification of Diseases, Injuries and Causes of Death the Committee appointed three new Sub-committees on (i) the classification of mental disorders, (ii) the classification of congenital malformations and disorders and (iii) the general problems of the revision. The following paragraphs provide brief reports of the work of these Sub-committees, together with that of the Cardiovascular Sub-committee.

Work of Sub-committees

The Cardiovascular Sub-committee met five times during the period. Agreement was reached with the corresponding United States Sub-committee on a joint U.K./U.S. proposal for classification of cardiovascular diseases which was presented to the World Health Organization Sub-committee on Classification of Diseases in November 1961. An amended version of the proposal, which was adopted by the WHO Sub-committee subject to further trial and comments, is being examined.

The Mental Disorders Sub-committee met eight times during the period. A draft classification of mental disorders was prepared and submitted to the WHO Sub-committee on Classification of Diseases in November 1961. It has been re-examined in the light of recommendations of the WHO Sub-committee and at a meeting with representatives of the corresponding United States Sub-committee a large measure of agreement was reached on a joint U.S./U.K. proposal to the WHO. A working group appointed by the Sub-committee has nearly completed the drafting of a glossary.

The Congenital Malformations Sub-committee met three times during the period. A draft classification was prepared and the principles of classification involved are being discussed with representatives of the corresponding U.S. Sub-committee.

The International Classification (Eighth Revision) Sub-committee met three times during the period, and have considered various matters not appropriate to the other Sub-committees but related to the Eighth Revision, including the classification of symptoms, the use of age distinctions in the ICD, the structure of short lists and the classification of injuries. An American proposal for elimination of combination categories in the ICD is being examined by the Sub-committee.

March 1963.

General Register Office,
Somerset House,
London, W.C.2.

Members of the Committee

Sir Ernest Rock Carling, LL.D., M.B., B.S., F.R.C.S., F.R.C.P., F.F.R.
(Chairman until he died in July 1960)
 Professor W. Melville Arnott, M.D., F.R.C.P. (*Chairman* from October 1960)
 Professor Hedley J. B. Atkins, D.M., M.Ch., F.R.C.S. (until 28th March 1962)
 Professor A. L. Banks, M.D., F.R.C.P., D.P.H.
 G. O. Barber, O.B.E., M.A., M.B., B.Chir., M.R.C.S.
 R. M. Blaikley (until 31st July 1961)
 Sir Allen Daley, M.D., F.R.C.P., D.P.H. (until 28th March 1962)
 J. O. F. Davies, M.D., B.S., M.R.C.S., L.R.C.P., D.P.H.
 W. R. S. Doll, O.B.E., M.D., D.Sc., F.R.C.P. (from 27th March 1962)
 Surgeon Captain F. P. Ellis, O.B.E., M.D., F.R.C.P., R.N. (until April 1960)
 Joan M. Faulkner, M.B., D.P.H.
 J. Fry, M.D., F.R.C.S., L.R.C.P.
 Professor R. B. Green, C.B.E., M.B., F.R.C.S., D.C.L. (until 27th March 1962)
 Professor F. Grundy, M.D., M.R.C.P., D.P.H. (until February 1961)
 M. A. Heasman, M.R.C.S., L.R.C.P., D.P.H. (from 2nd January 1961 to 30th April 1962)
 Professor Sir Austin Bradford Hill, C.B.E., D.Sc., Ph.D., F.R.S. (until 27th March 1962)
 Surgeon Captain J. M. Holford, O.B.E., M.B., F.R.C.P., R.N. (from April 1960)
 M. I. A. Hunter, M.D., B.Chir., F.R.C.P., M.R.C.S. (from 7th August 1962)
 W. N. Leak, M.A., M.D.
 Professor Sir Aubrey Lewis, M.D., F.R.C.P.
 W. J. Littlewood (from 1st August 1961 to 3rd September 1962)
 W. P. D. Logan, M.D., Ph.D., M.R.C.P., D.P.H. (until 1st January 1961)
 Sir Cuthbert G. Magee, C.B.E., F.R.C.P., D.P.H., Q.H.P.
 F. F. Main, M.B., Ch.B., F.R.C.P.(Ed.), D.P.H.
 P. L. McKinlay, M.D., D.P.H., F.R.S.(Ed.) (until 15th July 1960)
 Professor J. McMichael, M.D., F.R.C.P., F.R.S.
 A. W. Purdie, M.B., Ch.B., M.R.C.P.(Glas.), F.R.C.O.G.
 Professor D. D. Reid, M.D., D.Sc., M.R.C.P. (from 27th March 1962)
 A. H. T. Robb-Smith, M.D., F.R.C.P.
 C. C. Spicer, M.R.C.S., L.R.C.P. (from 1st May 1962)
 A. C. Stevenson, M.D., F.R.C.P., D.P.H. (from 8th March 1961)
 D. Thomson, M.D., D.P.H.
 Professor R. C. Wofinden, M.D., D.P.H. (from 27th February 1961)

Secretaries:	G. Rhodes (until October 1961) L. M. Feery (until February 1962) J. Murray (from February 1962)	}	General Register Office
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Members of the Sub-committees

Sub-committee on Classification of Cardiovascular Diseases

Professor W. Melville Arnott, M.D., F.R.C.P. (*Chairman*)
 M. A. Heasman, M.R.C.S., L.R.C.P., D.P.H. (until 2nd August 1962)
 W. P. D. Logan, M.D., Ph.D., M.R.C.P., D.P.H. (until 1st January 1961)

P. L. McKinlay, M.D., D.P.H., F.R.S.(Ed.) (until 15th July 1960)
 Professor J. McMichael, M.D., F.R.C.P., F.R.S.
 Professor J. N. Morris, M.A., D.Sc., F.R.C.P., D.C.H., D.P.H.
 Professor D. D. Reid, M.D., D.Sc., M.R.C.P.
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 C. C. Spicer, M.R.C.S., L.R.C.P. (from 1st May 1962)
 R. D. Teare, M.D., M.R.C.P.

Secretary: H. G. Corbett (General Register Office)

Sub-committee on Classification of Mental Disorders (formed 1960)

Professor Sir Aubrey Lewis, M.D., F.R.C.P. (*Chairman*)
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 Eileen M. Brooke, M.Sc., D.P.A.
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 W. P. D. Logan, M.D., M.R.C.P., Ph.D., D.P.H. (until 1st January 1961)
 A. B. Monro, M.D., Ph.D., D.P.M.
 Professor L. S. Penrose, M.D., F.R.C.P., F.R.S.
 K. Rawnsley, M.B., M.R.C.P., D.P.M.
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 Professor E. Stengel, M.D., F.R.C.P.
 J. Tizard, Ph.D.
 G. C. Tooth, M.D., D.P.M.

Secretary: G. Rhodes (until October 1961) } General Register
 H. G. Corbett (from 19th October 1961) } Office

Sub-committee on Classification of Congenital Malformations and Disorders
 (formed 1961)

A. C. Stevenson, M.D., F.R.C.P., D.P.H. (*Chairman*)
 Professor J. D. Boyd, M.A., M.D., D.Sc.
 C. O. Carter, B.M., M.R.C.P.
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 C. A. Clarke, M.D., F.R.C.P.
 M. A. Heasman, M.R.C.S., L.R.C.P., D.P.H. (until 2nd August 1962)
 W. P. D. Logan, M.D., Ph.D., M.R.C.P., D.P.H. (until 1st January 1961)
 R. G. Record, M.D., Ph.D., D.P.H.
 C. C. Spicer, M.R.C.S., L.R.C.P. (from 1st May 1962)
 A. M. Thomson, M.B., Ch.B., D.P.H.
 J. P. M. Tizard, M.A., B.M., F.R.C.P., D.C.H.
 Professor A. W. Wilkinson, Ch.M., F.R.C.S.(Eng.), F.R.C.S.(Ed.)

Secretary: H. G. Corbett (General Register Office)

Sub-committee on International Classification (Eighth Revision) (formed 1961)

A. H. T. Robb-Smith, M.D., F.R.C.P. (*Chairman*)

W. D. T. Brunyate, D.M., D.P.H.

D. L. Crombie, M.D.

M. A. Heasman, M.R.C.S., L.R.C.P., D.P.H.

W. P. D. Logan, M.D., Ph.D., M.R.C.P., D.P.H. (until 1st January 1961)

J. H. Morgan, F.M.R.

S. L. Morrison, M.B., Ch.B., D.P.H. (until 16th May 1962)

C. C. Spicer, M.R.C.S., L.R.C.P. (from 1st May 1962)

P. A. B. Raffle, M.D., D.P.H.

Secretary: H. G. Corbett (General Register Office)

GREAT BRITAIN AND IRELAND

Vital statistics

Table A1 of Part II shows the population of Great Britain at each census beginning with that of 1801 and of Great Britain and Ireland combined since the first census was taken in Ireland in 1821, together with figures for England and Wales, Scotland, Northern Ireland and the Irish Republic. This table also gives the population estimates for each mid-year from 1931. Figures given for the United Kingdom, etc., relate throughout to the areas now so named.

Table W(a) of Part II includes current *home* population data for the United Kingdom (and for Great Britain, England, Wales, Scotland and Northern Ireland) and the Irish Republic, together with live birth, death, infant mortality and marriage rates, 1961. These are repeated in Table CLI and compared with those for 1938 and for three five-year groups (1946-50, 1951-55 and 1956-60). For death rates the comparison is with 1931-38 instead of 1938 alone for the reason given in footnote (5) to the table.

Table CLI. Vital statistics: 1938 and 1946 to 1961,
Great Britain and Ireland

	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic ⁽¹⁾
Estimated mid-year home population (in thousands)						
1961 { Males	26,944	21,050	1,296	2,487	696	1,415
Females	28,648	22,486	1,334	2,697	732	1,400
Persons	55,592	43,536	2,630	5,184	1,427	2,815
Marriages ⁽²⁾						
1961	412,438	327,059	19,619	40,567	9,861	15,332
Persons marrying per 1,000 living						
1938	16.8	17.6	16.2	15.5	13.4	10.1
1946-50 ..	17.1	17.7	17.4	16.9	13.9	11.0
1951-55 ..	15.6	15.9	15.7	16.3	13.5	10.9
1956-60 ..	15.1	15.3	15.0	16.2	13.5	10.8
1961	14.8	15.0	14.9	15.7	13.8	10.9
Live births ⁽²⁾⁽³⁾						
1961	1,004,190	766,358	44,923	101,169	31,915	59,825
Per 1,000 living						
1938	15.7	15.1	15.3	17.7	20.0	19.4
1946-50 ..	18.5	18.0	17.9	19.8	22.0	22.2
1951-55 ..	16.0	15.3	15.7	17.9	20.8	21.3
1956-60 ..	17.0	16.4	16.2	19.2	21.7	21.1
1961	18.1	17.6	17.1	19.5	22.4	21.3

(1) For the Irish Republic, rates are based on *home* population throughout the table. The 1961 figure is "as at early April".

(2) The marriage and live birth rates for 1938 and from 1951 are based on *home* population, but the 1946-50 aggregates (except for the Irish Republic) are based on *total* populations.

(3) England and Wales: occurrences. Remainder: registrations.

Table CLI—continued

	Great Britain and Ireland	England	Wales	Scotland	Northern Ireland	Irish Republic ⁽¹⁾
Deaths ⁽⁴⁾						
1961	666,551	518,047	33,705	63,928	16,108	34,763
Per 1,000 living ..						
1931-38 ⁽⁵⁾ ..	12.4	12.0	12.9	13.3	14.4	14.2
1946-50 ..	11.9	11.7	12.6	12.5	11.9	13.3
1951-55 ..	11.7	11.6	12.7	12.1	11.3	12.5
1956-60 ..	11.6	11.5	12.4	12.0	10.8	11.8
1961	12.0	11.9	12.8	12.3	11.3	12.3
Infant mortality (deaths of infants under one year of age) ⁽⁶⁾						
1961	22,712	16,314	1,079	2,615	877	1,827
Per 1,000 live births ..						
1938	55	53	57	70	75	67
1946-50 ..	39	36	42	47	48	57
1951-55 ..	29	27	33	33	37	40
1956-60 ..	24	22	27	28	28	33
1961	23	21	24	26	27	31

(4) The death rates are based on total deaths and home populations, except that (apart from the Irish Republic) the 1946-49 element in the 1946-50 aggregates is based on civilian deaths and civilian populations.

(5) Here the 1931-38 aggregate is given, since crude death rates in the year 1938 were rather lower than in adjacent years.

(6) England and Wales: for 1957 onwards based on deaths per thousand live birth occurrences; for earlier years based on deaths per thousand related live births. Remainder: based on deaths per thousand births registered.

Population. The home population of Great Britain and Ireland at mid-1961 was estimated to be 55,592,000 (or slightly under if we stress the date of the estimate for the Irish Republic and assume the slight decline from earlier figures to have continued). This was an increase of 4.5 per cent on the 1951 Census population of 53,186,000. This single net figure, however, veils differences in direction and degree of population movement for Great Britain, Ireland, the United Kingdom, its constituent countries and the Irish Republic. These differences may represent persistence in long-standing trends, some recovery towards an earlier pattern of population change, a relapse after previous recovery or an important shift in the direction and size of population growth. Table CLII illustrates the changes in population growth from 1841 and 1951 to 1961 and also the variation in the proportion of the entire population of Great Britain and Ireland to be found in Great Britain, Ireland, the United Kingdom, England and Wales, England, Wales, Scotland, Northern Ireland and the Irish Republic which subsisted at 1841, 1951 and 1961. It is based on data from Table A1 with an additional grouping for the United Kingdom (throughout as at present constituted) and with separate figures of relative growth in England and Wales. In Wales (including Monmouthshire) 1,046,266 persons were enumerated at the 1841 Census, with 2,598,675 in 1951 and 2,644,002 in 1961.

A net balance of migration, outward or inward, will not only change the mere size of the population. Its direct effect will normally be much more pronounced on those within the 15-44 age-group than the rest and (though to a varying

Table CLII. Percentage increase in the intercensal populations 1841–1961 and 1951–61, and the percentage distribution of the populations, 1841, 1951 and 1961, Great Britain and Ireland

	Intercensal increase		Percentage distribution		
	1841–1961	1951–61	1841	1951	1961
Great Britain and Ireland	107·6	4·3	100·0	100·0	100·0
Great Britain	176·5	4·9	69·3	91·9	92·4
Ireland	— 48·3	— 2·1	30·7	8·1	7·6
United Kingdom	161·0	4·9	75·5	94·4	94·9
England and Wales	189·5	5·3	59·5	82·3	83·0
England	192·1	5·5	55·6	77·4	78·3
Wales	152·5	1·6	3·9	4·9	4·8
Scotland	97·6	1·6	9·8	9·6	9·3
Northern Ireland	— 13·6	3·9	6·2	2·6	2·6
Irish Republic	— 57·0	— 4·9	24·5	5·6	5·1

extent) on males rather than females. Substantial population change through migration can have a consequential effect on the number and rate per 1,000 of the population of births, marriages and deaths and on the assessment of their significance.

In this last connection, Table CLII draws attention to a long-persisting difference between Great Britain on the one hand and Ireland on the other. Ireland (which comprises about 27 per cent of the land area) had over 30 per cent of the combined population of Great Britain and Ireland in 1841: it had under 8 per cent in 1961. From over eight million people in 1841 it had fallen to well under six million by 1861, thereafter continuing to decline more gradually to a little over four million by 1931. Since then it has been virtually stationary at various levels around 4·25 million. The population of the Six Counties has continued to rise slightly since before the 1914–18 War (with a slight setback after partition), while that of the Republic (apart from the years during and around the 1939–45 War) has persistently declined.

Great Britain, by contrast, has grown from 18·5 million people in 1841 to over 51 million in 1961 and her proportion of the combined population has risen from under 70 to over 92 per cent. This is mainly, though not entirely, due to population growth in England (where under 15 million people in 1841 had increased to over 43 million in 1961). Wales had increased its population from 1·0 million to 2·6 million in the period, despite experience of net population decline in the nineteen-thirties.

Scotland, with a quarter of the area of Great Britain and Ireland, had slightly under 10 per cent of the entire population in 1841 and continues to have roughly the same proportion of the more than doubled population of 1961. As with England and Wales, 1911 was the great dividing year between patterns of population change. In Scotland increases averaging around 10 per cent per decade were replaced by a very much smaller rate of increase. Unlike England and Wales where recent years have seen a return to a new and probably long-term pattern of substantially bigger changes than those persisting since 1911, the

Scottish rate of increase has continued at an even lower level than that from 1911 to 1951. This of course is due to net outward migration, much of it to England and Wales. And as with movement of population between Great Britain and Ireland, this is a net consequence of substantial two-way traffic. In a recent three-month period, for example, 16,000 new entrants on doctors' lists in England and Wales had transferred from lists in Scotland. But in the same period no fewer than 9,000 patients transferred from lists in England and Wales to those of doctors practising in Scotland.

Marriage rates. The fall in the marriage rate for Great Britain and Ireland was arrested from 1959, since when it has persisted at 14·8 per thousand, after being 15·2 in 1957 and 14·9 in 1958. Though the rate for Scotland fell from 15·7 in 1959 to 15·5 in 1960, it was still the highest of the separate rates for the five countries and rose again from mid-1960 to mid-1961. Similarly the increased rate in the Irish Republic (persisting at 10·9 since 1959) has not raised it from the bottom of the list. England retained her 1959 rate in 1960 and 1961; that for Wales rose slightly in 1960 and again in 1961. Northern Ireland still maintained her increase over the 1959 rate in 1961 though to a slightly lesser extent than in 1960.

Birth rates. The live birth rate (which had been 17·1 per thousand in 1958 and 1959) rose to 17·7 for Great Britain and Ireland in 1960 and again to 18·1 in 1961, reflecting a continued increase in all parts of Great Britain though not in Ireland. The respective rates per thousand living persons were:

Year	England	Wales	Scotland	Northern Ireland	Irish Republic
1958	16·4	16·2	19·4	21·6	20·9
1959	16·5	16·1	19·2	21·9	21·1
1960	17·2	16·8	19·6	22·5	21·4
1961	17·6	17·1	19·5	22·4	21·3

The rates in England and Wales still remained, as always, significantly lower than those in Scotland and Ireland.

Infant mortality rates. In 1961 Great Britain and Ireland together again sustained the 1960 new low level with an infant mortality rate of 23 per thousand live births, after rates of 25 in 1956 and 1957, and 24 in 1958 and 1959, bringing the rate for the five-year period 1956–60 to 24 per thousand compared with 29 in the previous five years and 39 in 1946–50. The rate for England persisted at 22 per thousand in 1960 and fell to 21 in 1961. The somewhat higher rates for Scotland and Northern Ireland persisted at 26 and 27 per thousand respectively throughout 1960 and 1961 and the rate for Wales continued to improve. The outstanding feature of the separate figures for the five countries in 1960 was the fall of the infant mortality rate in the Irish Republic from 32 in 1959 to 29 per thousand live births in 1960, but this was not maintained in 1961. Scotland and Northern Ireland both had a higher infant mortality rate than the Irish Republic in 1958; but by 1956 they had improved to the rate the Republic achieved in 1960 and their improvement continues.

Cause of death. Table 7 of Part I gives a complete analysis for England and Wales of deaths by cause and sex at all ages for each year from 1950 to 1961. In 1959, Appendix A of Part I (Standardised Mortality Ratios, age specific death rates and infant mortality rates from selected causes) covered England and Wales, Scotland and Northern Ireland, and some of this information was repeated, together with data for the Irish Republic, in this section of Part III for that particular year. Beginning with 1960 Appendix A of Part I includes the Irish Republic as well as England and Wales, Scotland and Northern Ireland.

INTERNATIONAL CO-OPERATION IN POPULATION AND HEALTH STATISTICS

United Nations¹

Population Commission

Representatives from all fifteen member countries attended the eleventh session of the Population Commission, held at United Nations headquarters from the 7th to 17th February 1961. Mr. B. Benjamin, General Register Office, represented the United Kingdom. Mr. J. Mertens de Wilmars (Belgium) was again elected to the Chair. The Vice-Chairman was Mr. Hassan Hussein (United Arab Republic) and the *Rapporteur* Mr. Conrad Taeuber (U.S.A.).

The Report,¹ adopted unanimously by the Commission, reviewed what had been accomplished during the previous fifteen years and reiterated that the Commission's function is to assemble and comment on facts without intruding on the right of governments to formulate policy. The main purpose of recommendations made in the Report was to extend the range and improve the quality of information needed.

The Commission proposed two draft resolutions for adoption by the Economic and Social Council. The aim of the first, on the *World Population Census Programme*, was to ensure so far as possible that governments of the developing countries in particular should be given every assistance to make full use of the opportunity provided by a census to get information required for administrative purposes. While the emphasis in the past had been on training selected officials in methods of census-taking, future policy would be concerned with enabling them to master the techniques necessary to make the best use of the material collected.

A proposal to hold the second *World Conference on Population* in 1964 or 1965 was the subject of the other draft resolution. As in 1954, when the first Conference was convened, the aim is to enable demographers to compare notes, to discuss the implications of observed trends and to re-examine the principles and application of accepted methodology. The considerable developments in the decade since the last Conference make a stocktaking desirable.

At the thirty-first session of the Economic and Social Council the Report of the Population Commission was considered and its work programme endorsed by the Council's Social Committee, and at a plenary meeting on the 28th April the Council unanimously adopted² the draft resolutions proposed by the Population Commission. All the retiring members of the Commission were re-elected with the exception of Norway, who retired early and was replaced by India. At the later, thirty-second, session the Council decided to *increase the membership of the Commission to eighteen*. Those elected to fill the additional three vacancies were Syria, Ghana and Greece.

Commission on the Status of Women

In accordance with the resolution of the Economic and Social Council, to which reference is made on page 239 of the 1960 Commentary, the Secretary-General had formally asked Governments to comment on drafts of the *Convention* and the *Recommendation on consent to marriage, minimum age of marriage*

and registration of marriages. After considering the observations on both documents, made by Governments and by non-governmental organizations entitled to make their view known to the Council and its Commissions, the Commission proposed³ a draft resolution on each for consideration by the Council. Both resolutions, subsequently adopted⁴ by the Council, referred the documents in amended form to the General Assembly in the hope that the Convention would be adopted as soon as possible and the Recommendation endorsed. But the matter was not taken much further when the General Assembly met in the autumn of 1961 for its sixteenth session: the Third Committee adopted the Preamble and the first three Articles of the draft Convention and the Assembly resolved⁵ to assign priority to the rest of the Convention and to consideration of the Recommendation at the next session.

European Working Group on Electronic Data Processing Machines

The second session of the Working Group was held in Rome from the 26th April to 2nd May. On this occasion, when the Italian Central Statistical Office in co-operation with the F.A.O. Headquarters arranged visits to automatic data processing installations of different kinds, the United Kingdom was represented by Mr. A. Thatcher (Central Statistical Office), Mr. R. Corbett (O and M Division, Treasury) and Mr. T. Swales (Bank of England).

The Session resulted in a Report⁶ which drew attention to the organizational, personnel and technical problems of entering the world of automatic data processing, outlined the characteristics and operating performances of different types of equipment and indicated difficulties associated with the different phases of processing. The Report referred to the application of automatic data processing to different kinds of statistics, discussed the 'queuing' problem and suggested ways in which international co-operation would be useful.

Conference of European Statisticians

Sir Harry Campion, Director of the Central Statistical Office, represented the United Kingdom at the ninth plenary session of the Conference held in Geneva from the 10th to 14th July.

The Report⁶ of the second session of the Working Group on Electronic Data Processing Machines was considered. The Conference agreed on the *exchange of information* between national statistical offices which were invited to supply, for consideration, reports on specific problems. It recommended that *study tours* should be arranged and requested the Secretariat to explore the possibilities of setting up a *reference centre* of information on the use of automatic data processing for statistical purposes which could periodically circulate lists of new material received. It was agreed that future meetings of the Working Group should be given to the discussion of specific matters and that problems of editing and correcting data should be the subject for the next session.

The Conference discussed national reports of plans and information on *censuses of population and housing* and approved a proposed enquiry into the extent to which recommendations for improving comparability between censuses taken in Europe in 1960-61 had been effective. National census offices would be invited to prepare reports based on a standard questionnaire and the European Working Group on Censuses of Population and Housing would meet in 1963 to discuss the results of the enquiry.

Conference of Asian Statisticians

The fourth session, which took place in Tokyo from the 27th November to 8th December under the auspices of the Economic Commission for Asia and the Far East, considered the major project on censuses of population and agriculture reviewed by the third session. It was agreed that the progress reports on the censuses taken in the region should continue to be made, as processing and the publication of results were not yet completed.

Economic and Social Council

Two sessions were held during the year. The thirty-first in New York in April and the thirty-second in Geneva in July with a resumed session in New York in December. Under the subject of *technical assistance* discussed at the thirty-second session, a resolution was adopted⁷ which established an *ad hoc* committee of eight, from among the members of the Technical Assistance Committee and the Governing Council of the Special Fund, to study ways in which United Nations technical co-operation schemes could give more help in the preparation of national development plans and to consider the co-ordination of various United Nations programmes. Another resolution adopted⁸ by the Council aimed at encouraging the widest use of expert assistance and training facilities.

General Assembly

At the instance of Sweden and Denmark the subject of population growth and economic development was on the agenda for the sixteenth session of the United Nations General Assembly in the Autumn of 1961. The discussion opened in the Assembly's Second Committee on the basis of a draft resolution⁹ put forward by Ghana, Greece, Pakistan and Tunisia jointly with the original sponsors. The aim of the sponsors, who drew attention to resolutions in which both the General Assembly¹⁰ and the Economic and Social Council¹² had invited Member States to take proper account of the *interplay between economic and population changes*, was (a) to get the rates of population growth prevailing in different countries studied, (b) to get the results of such studies widely known and reported to the Assembly each year, (c) to invite Member States to seek technical assistance on population problems if they needed it and (d) to ensure that the subject of social and economic consequences of economic growth, particularly in countries that are less developed should not be overlooked at the Second World Population Conference. The addition of this item to an already overloaded agenda paper did not encourage its acceptance as a matter of priority and on the 19th December the Assembly, on the report of the Second Committee, decided¹¹ that lack of time precluded consideration of the subject, which was deferred to be taken at the seventeenth session.

World Health Organization

World Health Assembly

The World Health Assembly met for the first time in Asia when the fourteenth assembly was held in New Delhi from the 7th to 24th February.

Sir Kenneth Cowan, the Chief Medical Officer of the Department of Health for Scotland, outlined a new scheme¹² for *hospital morbidity recording in Scotland*.

One purpose of the scheme was to get prompt, as well as adequate, information and it was hoped that complete statistics would be available within a few months after the end of a given year.

Technical Conference on the Epidemiology of Mental Disorders

In connection with the World Health Organization's study of the epidemiological aspects of mental disorders in Europe, the WHO Regional Office for Europe convened an *ad hoc* meeting in Copenhagen from the 18th to 21st July, to discuss national mental health statistics. Miss E. M. Brooke of the General Register Office was elected Vice-Chairman.

The purpose of the meeting was to consider what information mental health statistics should be designed to give and what needed to be done to improve comparability between national statistics. The relative value of alternative forms of reporting, i.e. in respect of events or of persons, was discussed both from the administrative and epidemiological points of view. Among other aspects of comparability examined at the meeting were common definition of terms and uniformity in the classification of mental disorders for statistical purposes.¹³

European Technical Conference on Mortality Statistics

Representatives from twenty-two countries attended the meeting, arranged by the WHO Regional Office for Europe, which met from the 23rd to 28th October at Asnières-sur-Oise, France, to discuss and "promote the completeness, accuracy and comparability of statistics on mortality and the causes of death within the European region".

The United Kingdom was represented by Dr. A. Smith, of the Department of Health for Scotland. Dr. M. A. Heasman and Mr. H. G. Corbett of the General Register Office attended as consultants of WHO. Dr. Heasman read a paper on "The value and limitations of mortality statistics" and Mr. Corbett on "Factors influencing the comparability of mortality statistics".

Expert Committee on Health Statistics. Sub-Committee on Classification of Diseases

The Sub-Committee's first session¹⁴ was held in Geneva from the 13th to 21st November. With the aid of consultants in different medical specialties the Sub-Committee reviewed the usefulness of the International Classification of Diseases as a whole and examined various sections, with particular emphasis on cardiovascular diseases, perinatal conditions and mental disorders. Among other things the Sub-Committee discussed rules of selection of cause of death, examined the results of national and international studies in respect of the Eighth Revision, recommended further steps in preparation for the Revision and considered the coding of surgical operations and related questions.

Professor D. D. Reid of the London School of Hygiene and Tropical Medicine was a member of the Committee and Dr. Heasman and Mr. Corbett of the General Register Office represented the WHO Centre for the Classification of Diseases.

WHO Centre for the Classification of Diseases

During the year the Centre completed the draft of a *WHO instruction manual for coders* and reached the report stage on the exercise in the comparison of coding described on page 245 of the Commentary last year.

The major part of the year was spent preparing documents on (a) classification of mental disorders, (b) alphabetical index, (c) rules of selection, (d) structure of the International Classification of Diseases in relation to short lists and (e) statistical classification of cardiovascular disease, in readiness for the eighth decennial revision of the International Classification of Diseases.

Council of Europe

Working Party on Cancer Statistics

When the Working Party met a second time (the first occasion under Council of Europe auspices) on the 18th and 19th January at Strasbourg, Dr. Heasman was in the Chair. The purpose of the meeting was to consider the plan drawn up by Dr. Neurdenburg (Netherlands) for conducting a proposed enquiry into the comparability, as between the countries represented on the Working Party, of national statistics of cancer of certain sites. The method of working proposed by Dr. Neurdenburg was accepted subject to modifications designed to simplify it.¹⁵

International Statistical Institute

The thirty-third session of the Institute was held in Paris from the 29th August to 7th September. The Registrar General was represented by Mr. Benjamin.

There were wide-ranging discussions on statistical theory and methods, which included a joint meeting with the Biometrical Society on the functions of distributions in biology. Progress in the expansion of the programme on municipal statistics was reported, particular attention being paid to the statistical aspects of internal migration and other demographic features of urban and rural development and change. The various inferences drawn from statistics of lung cancer and the use of tobacco were also the subject of a special meeting.

International Congress on Mental Health

The VI International Congress on Mental Health took place under the auspices of the World Federation for Mental Health in Paris from the 30th August to 5th September. Miss Brooke was among those who attended.

The agenda of the Congress ranged widely from discussion on the evolution of the concept of mental health to a series of reviews of the current position on mental illnesses and their incidence in the population from youth to old age. The Congress discussed variations in mental health as between town and country, therapeutic advances, professional education and domestic and industrial aspects of mental health. The public health aspects of the subject were reviewed and the Congress was given an account of special surveys carried out in a number of countries.¹⁶

Visitors from Overseas

Fellowship schemes of the United Nations and the World Health Organization accounted for the majority of the eighty-nine visitors who came to the General Register Office during 1961 for varying periods of training. Included in the total was a group of thirty students from the United States. Other countries from which the visitors came were: Canada, China, Denmark, France, Germany, Ghana, Greece, India, Irish Republic, Israel, Italy, Jamaica, Japan, Jordan, Malaya, Netherlands, Pakistan, Poland, Sierra Leone, South Africa, Sweden, Thailand, Turkey, Venezuela and Yugoslavia.

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THE REGISTRATION SERVICE

Searches and certificates

Table T1 shows the growth in the registers at the General Register Office of births, deaths and marriages since 1866 and the extent to which the registers and indexes have been used in a series of years since then.

The number of searches undertaken in 1961 for government departments, mainly to verify ages of applicants for retirement pensions, at about 185,000 was slightly higher than in 1960. Apart from this present year and 1956, when there was a temporary increase due to the verification of the births of persons entering at late ages into national insurance in 1948, there has been a steady downward trend from about 555,000 in 1951. This reflects the gradual accumulation of verified information in the records of the departments usually concerned. There were about 239,000 searches in 1961, paid for by members of the public, showing a moderate increase over the 228,000 paid for in 1960.

During the year 315,000 applications were made by the public to the General Register Office for certified copies of the records. Of these applications 155,000 were by post and 160,000 were by personal applications through the Public Search Rooms in Somerset House. A sample check of applications relating mainly to events which took place in England and Wales but also to events registered in the Armed Forces, Consular and Miscellaneous records showed the following distribution by year of registration:

Years	Births (per cent)	Deaths (per cent)	Marriages (per cent)
1837-1849	3.8	4.9	4.8
1850-1859	2.6	3.8	3.3
1860-1869	2.9	3.2	3.0
1870-1879	4.3	3.0	3.1
1880-1889	5.4	2.9	2.6
1890-1899	9.7	3.6	3.0
1900-1909	13.9	3.8	4.8
1910-1919	11.1	4.9	6.4
1920-1929	10.8	6.0	8.6
1930-1939	15.4	10.1	12.4
1940-1949	13.2	16.0	17.5
1950-1959	5.9	27.3	28.0
1960	1.0	10.5	2.5

In about 8 per cent of the applications no positive results were forthcoming, either because the entries sought do not exist or the information available to trace and identify them is insufficient or incorrect; but negative information may in some cases be of value. In all, 313,000 certificates were issued, more than one copy of the same entry being taken in many cases.

The number of certificates issued by the local registration officers was just under 3,200,000, the highest so far recorded. Of these 83 per cent related to current events, i.e. they were issued by Registrars at or shortly after the time

of the registration, the remainder were issued from the District Register Offices by Superintendent Registrars and were related to events spread over much the same period as those issued from the General Register Office. The numbers broken down over types of certificates and whether related to a current event or otherwise are as follows:

Type of certificate	Issued by		Total
	Registrars (Current)	Superintendent Registrars (Past)	
Standard Birth	575,000	101,000	676,000
Standard Death	994,000	41,000	1,035,000
Standard Marriage	156,000	36,000	192,000
Short Birth	294,000	324,000	618,000
*Cheap Birth	2,000	8,000	10,000
*Cheap Death	627,000	9,000	636,000
*Cheap Marriage	(340)	11,000	11,000
Total	2,648,000	530,000	3,178,000

* Cheap certificates are issued under various Acts and may only be used for the purposes specified in the Acts.

Re-registration of births of legitimated persons

If the parents of a child marry after the child's birth the marriage will in certain circumstances legitimate the child. In these cases the birth should be re-registered to show the child as a legitimate child of its parents. Under the Legitimacy Act, 1926, a child was not legitimated by the marriage of its parents if either of them was married to a third person when the child was born. The Legitimacy Act, 1959, which came into operation on 29th October 1959, removed this restriction.

The figures of re-registrations since that date include, in addition to current legitimations under the earlier Act, two groups for whom legitimation would have been barred by that Act:

- (a) children whose parents were already married when the new Act came into force, but who had not been legitimated by the marriage because one, or both, of the parents was married to a third party at the date of the child's birth; in these cases legitimation took place on the date of operation of the new Act and the births should have been re-registered soon afterwards; the number of re-registrations contributed by this group should therefore decline each year;
- (b) children whose legitimation would have been barred under the earlier provisions but whose parents have married since the new Act came into force, i.e. the current legitimations by virtue of the new Act which may be expected to be a continuing addition to the total number of re-registrations.

Before the Act of 1959 the average number of re-registrations had remained steady at about 2,500 annually since 1950. In 1960, the first full year during

which the new provisions were in operation, 6,506 births were re-registered; this is less than the successful applications for re-registration made in that year as there were a substantial number of applications outstanding at the end of the year. The figure of 8,513 re-registrations in 1961 is consequently greater than the number of applications made in that year, but it is clear that there was a substantial further increase in 1961 compared with 1960.

Rather more than half of the applications in both 1960 and 1961 related to children legitimated by virtue of the provisions of the 1959 Act; but it is clear that there has also been a substantial increase in applications for re-registration under the earlier provisions amounting to about a thousand cases more in 1961 than the annual figure of about 2,500 from 1951 to 1958. This increase is proportionately of the same order as the rise in the annual numbers of illegitimate births, from a level of about 33,000 over the period 1951-58 to 43,000 in 1960 and 48,000 in 1961.

About 45 per cent of the births re-registered in 1961 by virtue of the provisions of the 1959 Act related to persons whose parents had married each other before the Act came into operation and who were therefore legitimated from the date when the Act came into effect in October 1959. This compares with a percentage of about 70 in 1960 and may be expected to continue to decline, since applications for re-registration in these cases were required to be made soon after the Act came into effect.

Adopted children

The number of entries in the Adopted Children Register since 1927, when the register began, is shown in Table T4 for groups of years from 1927 to 1950 and for each year since 1956. The increase which began in 1959 continued in 1961, when 15,997 adoption orders were registered. The increase probably reflects the rise in the numbers of illegitimate births.

The Adoption Act, 1958, which came into operation on 1st April 1959, introduced provision for the High Court and the County Courts to make provisional adoption orders. These orders confer authority on a person not domiciled in Great Britain to take a child out of this country for adoption. In 1961, 249 provisional adoption orders were made.

Table T5 analyses adoptions by the sex, age and legitimacy of the child and shows the number of children who were adopted by one or both of their natural parents. The table shows that in 27 per cent of all adoptions one or both of the adoptive parents were the natural parents of the child. The decrease in this proportion in recent years probably reflects the fact that a number of children who might previously have been adopted are now legitimated by virtue of the Legitimacy Act, 1959.

THE NATIONAL HEALTH SERVICE CENTRAL REGISTER

The function of the National Health Service Central Register (which is maintained by the General Register Office on an agency basis for the National Health Service) is to ensure as far as possible that doctors' lists of National Health Service patients do not include persons who are no longer eligible to be on a particular doctor's list, e.g. because they have transferred to another doctor or because they have emigrated. The ways in which this can happen are broadly:

- (a) that on transfer to another doctor there may be a failure to notify the original doctor of removal,
- (b) that a patient may be accepted as a new National Health Service patient when he is, in fact, already on a doctor's list,
- (c) that on enlistment into the Forces, emigration or death there may be a failure to remove a patient from his doctor's list.

The Central Register acts as a clearing house for sorting out cases where any of these circumstances might arise.

During the year 1961 the Central Register received notifications of 1,625,846 persons who were reported as having registered with doctors for the first time. By reference to the existing register it was found that 262,443 of these were already on doctors' lists and duplicate registrations in these cases were thus avoided.

The Central Register also notified Executive Councils of the names of 923,065 persons for removal from doctors' lists by reason of death (559,594), enlistment (53,449), embarkation (304,725), or becoming long-term patients in psychiatric hospitals (5,297). The last figure reflects an improvement in the reporting system from such hospitals. It was not, in fact, possible for Executive Councils to remove from doctors' lists all the persons notified to them for removal because, in many cases, there were insufficient identifying particulars. In addition, 1,478,772 persons were notified as having changed their doctor on removal from the area of one Executive Council to another.

PARLIAMENTARY AND LOCAL GOVERNMENT ELECTORS

Electoral Registers

As required by the Electoral Registers Act, 1949, and the Representation of the People Act, 1949, a local register of electors based on a canvass is prepared in the autumn of each year. This distinguishes between those who are:

- (a) parliamentary and local government electors by virtue of residence on the qualifying date;
- (b) local government electors with a non-resident qualification on the qualifying date by virtue of occupancy (as owner or tenant) of any rateable land or premises of not less than £10 rateable value per occupier.

There is also a service register for any member of the Armed Forces and other persons employed in the service of the Crown in a post outside the United Kingdom and for their wives if with them.

The qualifying date for inclusion on the register is 10th October in England and Wales and the registers must be used for elections held in the twelve months beginning on the 16th February of the following year.

A person not of full age on the qualifying date but who will be so on the following 15th June is to be included on the register though there is no entitlement to vote before the following 2nd October. Such persons are shown separately in Table CLIII below as "Young Electors". There are 250,557 "Young Electors" on the 1961 register of electors. By definition, this group should include all persons (except aliens and others who are not entitled to be registered) who were aged between 20 years 4 months and 21 years on the qualifying date. It can be estimated that the total number of persons in this age-group in England and Wales is about 370,000. After allowing for those not entitled to be registered, the discrepancy between actual and potential registrations is substantial. It would appear that the main reason is probably that many householders, in completing the forms from which the register is compiled, either fail to appreciate that persons in this age-group should be included, or fail to indicate that they are not yet 21.

Total electorate

The particulars recorded in Tables U and V for 1961 have been taken from statements sent to the Registrar General by Electoral Registration Officers and Clerks to local authorities. They relate to the register which came into force on 16th February 1961.

Table U refers to parliamentary and Table V to local government electors and elections. Table CLIII shows a few summary figures for 1961 and earlier years.

Table CLIII. Parliamentary and local government electors, 1956 to 1961, England and Wales

Register (qualifying date in brackets)	Parliamentary Register				Local Government Register
	Total at qualifying date	Services Register (included in col. 2)	“ Young Electors ” (not included in cols. 2 and 3)		
			Total	Services (included in col. 4)	
1	2	3	4	5	6
1956 (10th Oct. 1955) ..	30,679,509	289,615	248,420	18,259	30,795,617
1957 (10th Oct. 1956) ..	30,737,369	295,084	243,793	22,593	30,855,871
1958 (10th Oct. 1957) ..	30,795,834	283,383	250,464	26,707	30,914,568
1959 (10th Oct. 1958) ..	30,850,124	274,628	258,688	24,129	30,969,488
1960 (10th Oct. 1959) ..	30,974,254	279,936	245,464	25,435	31,096,735
1961 (10th Oct. 1960) ..	31,020,479	278,100	250,557	6,466	31,144,715

The number of parliamentary electors in England and Wales consistently corresponds almost exactly with the estimated *total* population aged 21 and over, excluding aliens resident here and those categories of persons not qualified to vote. This indicates that the discrepancies in different constituencies, due mostly to time lags in adding names to the registers or removing them, largely cancel out when aggregated for England and Wales as a whole. The percentages which the total parliamentary electorate represented of the estimated *total* population in the years 1956 to 1961 were:

1956	1957	1958	1959	1960	1961
68·4	68·2	68·1	67·8	67·5	67·0

The proportion of the total population included on the local government register was 67·3 per cent in 1961. This is a slightly higher proportion than that of the parliamentary register, on account of the inclusion of those local government electors who have non-resident qualifications. There are just over 124,000 of these in England and Wales. Normally the number increases only by a few hundred persons each year; but between the compilation of the 1960 and 1961 registers, 1,700 names were added.

Size of parliamentary constituencies

Tables CLIV (a) and (b) show for 1958 and 1961 the distribution of parliamentary constituencies, classified into county and borough constituencies, by their number of parliamentary electors separately for England and Wales, a

different electoral quota having been fixed for each country under the guiding principles of the consolidating House of Commons (Redistribution of Seats) Act, 1949.

Table CLIV (a). Parliamentary constituencies by size, distinguishing county and borough constituencies, 1958 and 1961, England

Total number of electors at qualifying date	Number of constituencies			
	1958		1961	
	County	Borough	County	Borough
30,000-	—	—	—	1
35,000-	1	4	1	9
40,000-	18	14	19	15
45,000-	33	35	26	45
50,000-	49	77	41	72
55,000-	50	63	48	62
60,000-	37	47	31	35
65,000-	22	24	26	25
70,000	11	20	21	18
75,000-	1	4	6	4
80,000 and over	—	1	3	3
Total	222	289	222	289

Table CLIV (b). Parliamentary constituencies by size, distinguishing county and borough constituencies, 1958 and 1961, Wales

Total number of electors at qualifying date	Number of constituencies			
	1958		1961	
	County	Borough	County	Borough
Under 30,000	1	—	1	—
30,000-	1	1	1	1
35,000-	4	1	4	1
40,000-	2	1	2	1
45,000-	5	1	5	1
50,000-	6	1	6	—
55,000-	4	2	3	3
60,000-	2	2	3	2
65,000-	1	—	1	—
70,000-	—	1	—	1
75,000 and over	—	—	—	—
Total	26	10	26	10

While the average number of electors in a parliamentary constituency in England has risen slightly from 56,753 in 1958 to 57,205 in 1961, it is to be noted that, while up to 1960 there was increasingly closer approximation to each other of the average number of voters in county and borough constituencies, the average size of a county constituency in England has now begun to outstrip that of a borough constituency.

The distribution of constituencies by size shows a marked upward shift in the county constituencies while in the borough constituencies there is no such pronounced trend. There are now 30 county constituencies larger than 70,000 compared with only 12 in 1958.

In Wales, the average number of electors in a parliamentary constituency has fallen slightly from 49,858 in 1958 to 49,682 in 1961. The average size of a county constituency is still considerably smaller than that of a borough constituency.

Local government elections

Elections for county councils took place in 1961. Table CLV shows the percentage of the electorate voting in contested county council elections in England and Wales, separately, and in the standard regions. In England and Wales as a whole 35.7 per cent of the electorate voted; in only 16 out of 62 counties did the proportion, in contested elections, exceed 50 per cent (in England there were only five such counties out of 49). In Wales, the proportion voting in contested elections was larger, 51.0 per cent (46.6 per cent in South East Wales and 61.3 per cent in the remainder). There was little variation in the proportion voting among the regions of England; the smallest was 31.9 per cent (Southern) and the largest 37.6 per cent (Northern).

Local government elections in urban areas

Table CLVI shows the proportions voting in contested elections in various types of urban area.

In earlier comments on urban local authority elections, attention has been drawn to the significant tendency for the percentage voting to fall as the size of local authority increases, although this is by no means an invariable rule.

In 1961, the inverse relationship between local authority size and its proportion of the electorate voting was still visible. It is clear that the larger urban authorities have special difficulties in reaching the level of participation in elections attained in smaller urban and in rural authorities.

Local government elections in rural districts

Table CLVII shows the proportions voting in contested elections in rural districts. Here again as in the county council elections the level of participation was much higher in Wales than in England. Generally, the proportions are higher than for contested elections in urban areas and much higher than for county council contests.

Table CLV. Local government elections. Percentage of electorate voting in contested county council elections, 1961,
England and Wales and standard regions

Area	Percentage of electorate voting							Contested elections			
	Under 30	30–	35–	40–	50–	60–	70 and over	Total county councils	Total electorate	Electorate voting	Percentage of electorate voting
England and Wales	6	14	20	6	4	7	5	62	12,917,230	4,611,139	35.7
England	6	14	19	5	2	2	1	49	12,589,424	4,443,813	35.3
Wales (including Monmouthshire)	—	—	1	1	2	5	4	13	327,806	167,326	51.0
Standard regions:											
Northern	—	1	2	—	1	1	—	5	417,007	156,989	37.6
East and West Ridings	1	—	1	—	—	—	—	2	793,858	274,990	34.6
North Western	—	2	—	—	—	—	—	2	1,174,995	400,324	34.1
North Midland*	—	3	2	2	—	1	1	9	734,156	266,091	36.2
Midland	1	—	2	2	—	—	—	5	784,826	255,765	32.6
Eastern†	—	2	5	1	1	—	—	9	1,853,093	649,346	35.0
London and South Eastern	1	1	4	—	—	—	—	6	5,680,980	2,071,203	36.5
Southern	2	1	2	—	—	—	—	5	674,918	215,566	31.9
South Western‡	1	4	1	—	—	—	—	6	475,591	153,539	32.3
Wales I (South East)	—	—	1	1	—	1	1	4	228,969	106,777	46.6
Wales II (remainder)	—	—	—	—	2	4	3	9	98,837	60,549	61.3

* Includes the whole of Derbyshire.

† Includes the whole of Essex and Hertfordshire.

‡ Includes the whole of Dorset.

Table CLVI. Local government elections. Percentage of electorate voting in contested elections in urban areas, 1961,
England and Wales

Electorate at qualifying date	Percentage of electorate voting										Contested elections				Percent- age of elect- orate voting	
	Percentage of electorate voting										Total electorate	Electorate voting	Total urban areas	75 and over		
	Under 25	25- 30	30- 35	35- 40	40- 45	45- 50	50- 55	55- 60	60- 65	65- 70						
County boroughs																
Under 50,000	1	1	2	8	3	3	3	1	—	19	673,298	300,224	44.6
50,000- 70,000	1	1	3	2	4	3	2	2	—	16	759,587	344,922	45.4
70,000- 100,000	—	1	5	5	5	4	—	—	—	20	1,359,720	594,857	43.7
100,000- 200,000	1	3	3	9	5	—	—	—	—	21	2,792,724	1,138,122	40.8
200,000 and over	—	2	3	1	1	—	—	—	—	7	2,761,491	1,012,971	36.7
Total	3	8	16	25	18	10	3	—	—	83	8,346,820	3,391,096	40.6
Municipal boroughs and urban districts																
Under 5,000	2	4	7	15	19	22	33	29	17	19	547,413	287,450	52.5
5,000- 10,000	4	5	10	14	19	30	21	25	18	5	888,499	438,187	49.3
10,000- 20,000	3	9	10	20	39	35	38	17	6	4	1,839,954	850,685	46.2
20,000- 50,000	4	5	18	37	46	42	19	13	3	1	4,587,580	1,925,108	42.0
50,000 and over	5	2	9	12	8	1	1	1	—	—	2,598,015	919,143	35.4
Total	18	25	54	98	131	130	112	85	44	29	10,461,460	4,420,573	42.3

Table CLVII. Local government elections. Percentage of electorate voting in contested rural district elections, 1961,
England and Wales and standard regions

Area	Percentage of electorate voting											Contested elections			
	Under 25	25-30	30-35	40-45	45-50	50-55	55-60	60-65	70-	75 and over	Total rural districts	Total electorate	Electorate voting	Percentage of electorate voting	
England and Wales	14	16	35	43	54	56	46	41	29	23	16	402	1,788,079	804,206	45.0
England	13	16	35	43	53	53	44	36	26	17	7	354	1,549,160	656,291	42.4
Wales (including Monmouthshire)	1	—	—	—	1	3	2	5	3	6	9	48	238,919	147,915	61.9
Standard regions:															
Northern	—	2	2	6	5	5	9	2	6	2	1	44	155,828	68,888	44.2
East and West Ridings	1	2	5	4	3	4	3	1	—	—	—	26	164,822	67,018	40.7
North Western	—	1	2	1	4	2	5	2	2	1	—	20	86,257	39,183	45.4
North Midland*	2	—	4	8	6	5	6	11	1	2	—	46	202,451	88,422	43.7
Midland	1	—	1	3	5	9	4	6	5	4	—	39	158,316	75,642	47.8
Eastern†	2	—	4	4	14	11	6	6	5	2	—	55	232,857	97,740	42.0
London and South Eastern	3	2	4	3	6	2	2	2	—	1	1	26	112,316	46,247	41.2
Southern	2	6	6	3	4	4	1	—	2	1	2	31	159,615	54,581	34.2
South Western‡	2	3	7	11	6	11	8	6	5	4	2	67	276,698	118,570	42.9
Wales I (South East)	—	—	—	—	1	2	1	2	2	5	3	20	153,406	92,828	60.5
Wales II (remainder)	1	—	—	—	—	1	1	3	1	1	6	28	85,513	55,087	64.4

* Includes the whole of Derbyshire.

† Includes the whole of Essex and Hertfordshire.

‡ Includes the whole of Dorset.

The basis for Tables CLVI and CLVII is the list in column 7 of Table V in Part II. This gives for each local authority and for appropriate groupings the percentage of all electors eligible to vote who did so, i.e. the quotient obtained by dividing votes cast by total electorates of divisions, wards or parishes in which a ballot was taken, multiplied by 100.

This measure is, however, only one part of the whole picture. It has also to be borne in mind that participation in local elections is limited by the proportion of contested seats. It is necessary therefore to complete the picture by looking at the proportion of seats for which there was no contest and therefore no participation. Alternatively, a composite index of participation in local elections could be obtained by using as denominator the total number of local government electors in each local authority or group of authorities. The statement below compares the two methods of presentation:

District	Voters as a percentage of electorates of contested wards and parishes	Percentage of councillors returned unopposed	Voters as a percentage of all Local Government electors in those local authorities holding any elections
County boroughs ..	40·6	12·8	36·7
Municipal boroughs and urban districts	42·3	28·5	34·2
Rural districts ..	45·0	74·0	14·7

This comparison does bring out the fact that owing to the high proportion of uncontested seats in rural districts, the proportion of the total electorate actually taking part in a contest is much lower than the proportion casting a vote when given a chance to do so.

Elections in different types of local authority

Table CLVIII gives the voting figures in recent years for all the various types of local authority down to rural districts.

With a single exception—the low figure for non-county boroughs and urban districts in 1956—the percentage of the electorate voting in contested elections in 1960 was the lowest for over a decade in each of the groups holding elections in that year. For the 1961 elections, the proportions are higher than in the previous year and are generally back to the level of 1958.

Central Index of Service Voters

During 1961, the Central Index of Service Voters (which is maintained by the General Register Office on an agency basis) received from Electoral Registration Officers 29,908 declarations by persons qualified to be included in the electoral

Table CLVIII. Local government elections. Percentage of electorate voting in contested elections, 1953 to 1961, England and Wales

District	1953	1954	1955	1956	1957	1958	1959	1960	1961
Administrative counties	—	—	36.5	—	—	33.3	—	—	35.7
County boroughs	45.2	42.8	43.8	37.6	40.0	40.3	41.0	35.4	40.6
Other boroughs and urban districts	46.8	45.7	45.0	39.4	44.1	42.9	42.1	40.4	42.3
Rural districts	47.3	47.1	48.2	41.3	45.2	46.2	42.1	37.5	45.0
Total	46.2	44.3	41.6	38.7	42.2	38.6	41.6	38.0	39.5

registers as service voters. The categories of persons qualified as service voters are:

- (i) any person who is a member of H.M. Forces;
- (ii) any person employed in the services of the Crown in a post outside the United Kingdom;
- (iii) any woman who is the wife of a service voter and is residing outside the United Kingdom to be with her husband.

A further 13,093 declarations were received in respect of persons under the age of 21 years. The Central Index notified Electoral Registration Officers of 7,840 persons who had made declarations before reaching the age of 21 years but who, during 1961, attained that age. Altogether, 37,748 new service voters were added to the electoral registers.

In the same period, Electoral Registration Officers were notified of 108,516 names of persons whose declarations ceased to be in force, and 3,536 declarations by persons under full age were cancelled because they ceased to have a service qualification before attaining full age.

APPENDICES

FERTILITY BY YEAR OF MARRIAGE, 1920-1961
Women married once only, England and Wales

Mean family size

[illegible]

Table 1 (b).—Marriage age under 20

Mean family size

Calendar year of marriage		Marriage duration (exact years)																				Calendar year of marriage														
		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			20	21	22	23	24	25	26	27	28	29	30		
1920-24		-03	-57	-91	-119	-143	-165	-185	-203	-221	-236	-250	-264	-277	-288	-298	3-08	3-17	3-25	3-33	3-40	3-46	3-51	3-56	3-59	3-62	3-65	3-66	3-67	3-67	3-67	3-67	3-67	1920-24		
1925		-04	-58	-89	-116	-139	-159	-178	-194	-210	-225	-238	-250	-262	-272	-282	-291	2-97	3-06	3-13	3-21	3-27	3-34	3-39	3-43	3-46	3-48	3-49	3-49	3-50	3-50	3-50	3-50	3-50	1925	
1926		-04	-60	-91	-117	-138	-158	-176	-191	-206	-220	-234	-248	-259	-269	-279	-288	2-96	3-04	3-12	3-19	3-26	3-33	3-37	3-41	3-43	3-44	3-45	3-46	3-46	3-46	3-46	3-46	3-46	1926	
1927		-05	-63	-92	-116	-137	-157	-174	-190	-205	-218	-233	-244	-256	-266	-276	-285	2-94	3-02	3-10	3-17	3-23	3-31	3-34	3-37	3-39	3-40	3-41	3-42	3-42	3-42	3-42	3-42	3-42	1927	
1928		-04	-60	-94	-118	-142	-160	-177	-193	-209	-222	-236	-247	-258	-268	-279	-288	2-98	3-07	3-16	3-25	3-31	3-36	3-40	3-43	3-44	3-46	3-47	3-47	3-47	3-47	3-47	3-47	3-48	1928	
1929		-03	-65	-95	-120	-141	-160	-177	-194	-210	-224	-237	-250	-262	-271	-281	-290	3-00	3-09	3-17	3-24	3-29	3-33	3-36	3-38	3-40	3-41	3-42	3-42	3-42	3-42	3-42	3-42	3-42	1929	
1930		-03	-63	-96	-121	-142	-161	-180	-197	-212	-225	-238	-250	-260	-271	-281	-292	2-99	3-09	3-16	3-22	3-26	3-30	3-33	3-35	3-37	3-38	3-39	3-39	3-39	3-39	3-39	3-39	3-40	1930	
1931		-02	-63	-92	-115	-137	-157	-175	-191	-206	-221	-233	-245	-256	-267	-278	-287	2-98	3-07	3-14	3-20	3-24	3-28	3-30	3-33	3-34	3-36	3-36	3-36	3-37	3-37	3-37	3-37	3-37	1931	
1932		-03	-62	-92	-117	-137	-156	-174	-191	-204	-217	-230	-243	-255	-267	-279	-292	3-03	3-11	3-18	3-23	3-27	3-31	3-34	3-36	3-38	3-39	3-40	3-40	3-40	3-40	3-40	3-40	3-40	1932	
1933		-04	-64	-94	-117	-138	-157	-175	-190	-203	-215	-228	-242	-255	-268	-282	-294	3-03	3-10	3-16	3-20	3-24	3-28	3-30	3-33	3-34	3-35	3-36	3-36	3-36	3-36	3-36	3-36	3-36	1933	
1934		-03	-64	-94	-118	-138	-158	-176	-190	-205	-219	-234	-248	-263	-278	-290	-301	3-09	3-15	3-21	3-25	3-29	3-32	3-35	3-37	3-38	3-39	3-39	3-39	3-39	3-39	3-39	3-39	3-39	1934	
1935		-03	-62	-92	-116	-136	-155	-172	-188	-203	-218	-231	-246	-261	-274	-284	-293	3-00	3-06	3-11	3-16	3-19	3-22	3-25	3-27	3-28	3-29	3-30	3-30	3-30	3-30	3-30	3-30	3-30	1935	
1936		-04	-62	-93	-117	-138	-156	-172	-188	-203	-219	-234	-250	-264	-276	-285	-293	2-99	3-05	3-10	3-15	3-19	3-22	3-25	3-27	3-28	3-29	3-29	3-29	3-29	3-29	3-29	3-29	3-29	1936	
1937		-03	-59	-89	-113	-132	-150	-168	-184	-201	-218	-236	-251	-264	-274	-283	-291	2-98	3-04	3-10	3-14	3-18	3-22	3-25	3-27	3-28	3-28	3-28	3-28	3-28	3-28	3-28	3-28	3-28	1937	
1938		-03	-61	-92	-115	-134	-154	-171	-187	-206	-224	-239	-251	-262	-272	-279	-286	2-92	2-98	3-03	3-07	3-11	3-14	3-17	3-19	3-20	3-20	3-20	3-20	3-20	3-20	3-20	3-20	3-20	1938	
1939		-02	-43	-70	-93	-112	-132	-151	-169	-191	-208	-223	-235	-246	-256	-264	-271	2-77	2-83	2-88	2-92	2-96	2-99	3-02	3-02	3-02	3-02	3-02	3-02	3-02	3-02	3-02	3-02	3-02	3-02	1939
1940		-02	-32	-59	-81	-100	-118	-139	-162	-182	-196	-208	-220	-229	-238	-245	-251	2-57	2-62	2-67	2-71	2-75	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	1940
1941		-02	-30	-58	-79	-99	-120	-145	-168	-184	-198	-211	-222	-232	-240	-247	-253	2-59	2-64	2-69	2-73	2-76	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	2-78	1941
1942		-02	-30	-55	-78	-100	-125	-149	-168	-183	-197	-208	-219	-228	-236	-243	-250	2-56	2-61	2-65	2-69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1942
1943		-02	-34	-62	-86	-111	-136	-156	-174	-188	-201	-212	-223	-231	-239	-245	-251	2-57	2-62	2-66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1943
1944		-03	-38	-68	-96	-123	-146	-165	-182	-195	-207	-218	-228	-236	-244	-251	-257	2-63	2-68	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1944
1945		-04	-35	-70	-101	-126	-148	-167	-184	-199	-211	-222	-232	-242	-250	-257	-263	2-69	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1945
1946		-04	-42	-80	-109	-133	-154	-173	-190	-205	-218	-230	-241	-251	-260	-267	-274	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1946
1947		-04	-46	-84	-111	-135	-156	-175	-192	-207	-221	-233	-243	-254	-263	-271	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1947
1948		-04	-48	-84	-111	-134	-157	-178	-195	-210	-224	-237	-249	-259	-268	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1948
1949		-04	-48	-84	-112	-138	-160	-181	-199	-214	-228	-241	-252	-263	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1949
1950		-04	-52	-83	-111	-138	-161	-183	-203	-219	-236	-250	-264	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1950
1951		-04	-47	-78	-106	-132	-155	-177	-196	-213	-228	-241	-251	-260	-267	-274	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1951
1952		-04	-47	-79	-106	-132	-157	-178	-196	-215	-231	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1952
1953		-04	-48	-80	-107	-134	-159	-181	-201	-217	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1953
1954		-04	-47	-78	-106	-132	-157	-179	-199	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1954
1955		-04	-45	-77	-105	-132	-155	-177	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1955
1956		-04	-46	-78	-108	-135	-160	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1956
1957		-04	-46	-78	-108	-136	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1957
1958		-04	-47	-80	-110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1958
1959		-04	-47	-80	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1959
1960		-04	-50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1960
1961		-04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1961

Table 1 (d).—Marriage age 25-29

Mean family size

Calendar year of marriage	Marriage duration (exact years)																														Calendar year of marriage	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		30
1920-24	-0.3	-3.3	-6.2	-8.2	-10.0	-1.15	-1.28	-1.39	-1.49	-1.58	-1.65	-1.70	-1.75	-1.78	-1.81	-1.84	-1.85	-1.86	-1.87	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	1920-24
1925	-0.3	-3.0	-5.6	-7.3	-8.9	-1.03	-1.15	-1.26	-1.35	-1.42	-1.48	-1.54	-1.58	-1.62	-1.64	-1.66	-1.68	-1.68	-1.69	-1.69	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	-1.70	1925
1926	-0.3	-2.9	-5.4	-7.2	-8.8	-1.01	-1.13	-1.23	-1.32	-1.39	-1.45	-1.51	-1.55	-1.58	-1.60	-1.62	-1.64	-1.65	-1.66	-1.66	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	1926
1927	-0.2	-2.7	-5.0	-6.8	-8.3	-0.97	-1.07	-1.18	-1.26	-1.34	-1.40	-1.46	-1.50	-1.53	-1.56	-1.58	-1.60	-1.61	-1.61	-1.62	-1.63	-1.63	-1.63	-1.63	-1.63	-1.63	-1.63	-1.63	-1.63	-1.63	-1.63	1927
1928	-0.3	-2.7	-5.2	-7.0	-8.5	-0.98	-1.10	-1.19	-1.27	-1.35	-1.41	-1.46	-1.50	-1.53	-1.56	-1.58	-1.60	-1.61	-1.62	-1.63	-1.63	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	1928
1929	-0.3	-2.6	-5.0	-6.8	-8.3	-0.96	-1.09	-1.19	-1.27	-1.34	-1.40	-1.46	-1.50	-1.53	-1.56	-1.59	-1.61	-1.62	-1.63	-1.64	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	1929
1930	-0.2	-2.7	-5.0	-6.8	-8.4	-0.97	-1.10	-1.20	-1.30	-1.38	-1.44	-1.48	-1.53	-1.57	-1.60	-1.63	-1.65	-1.67	-1.68	-1.68	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	1930
1931	-0.2	-2.6	-4.9	-6.6	-8.2	-0.95	-1.07	-1.17	-1.26	-1.34	-1.39	-1.44	-1.48	-1.53	-1.56	-1.59	-1.61	-1.63	-1.64	-1.64	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	1931
1932	-0.2	-2.5	-4.7	-6.4	-7.9	-0.93	-1.05	-1.15	-1.23	-1.29	-1.35	-1.40	-1.44	-1.48	-1.52	-1.55	-1.59	-1.61	-1.63	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	-1.64	1932
1933	-0.3	-2.6	-4.9	-6.7	-8.2	-0.96	-1.08	-1.17	-1.24	-1.30	-1.37	-1.44	-1.50	-1.54	-1.58	-1.61	-1.62	-1.64	-1.64	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	1933
1934	-0.3	-2.5	-4.8	-6.5	-8.0	-0.94	-1.06	-1.14	-1.21	-1.29	-1.37	-1.45	-1.50	-1.55	-1.58	-1.61	-1.62	-1.64	-1.64	-1.64	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	-1.65	1934
1935	-0.2	-2.5	-4.7	-6.6	-8.2	-0.94	-1.04	-1.12	-1.21	-1.24	-1.33	-1.42	-1.48	-1.55	-1.59	-1.62	-1.64	-1.66	-1.66	-1.67	-1.67	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	1935
1936	-0.2	-2.4	-4.7	-6.4	-8.0	-0.90	-1.02	-1.11	-1.21	-1.24	-1.34	-1.42	-1.50	-1.56	-1.60	-1.62	-1.64	-1.65	-1.66	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	-1.67	1936
1937	-0.3	-2.3	-4.5	-6.3	-7.8	-0.85	-1.00	-1.13	-1.26	-1.36	-1.42	-1.50	-1.58	-1.63	-1.66	-1.68	-1.70	-1.71	-1.72	-1.72	-1.71	-1.71	-1.71	-1.71	-1.71	-1.71	-1.71	-1.71	-1.71	-1.71	-1.71	1937
1938	-0.3	-2.4	-4.5	-6.1	-7.4	-0.89	-1.04	-1.17	-1.30	-1.42	-1.52	-1.59	-1.64	-1.67	-1.70	-1.72	-1.73	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	-1.74	1938
1939	-0.2	-2.0	-4.0	-5.7	-7.4	-0.90	-1.04	-1.18	-1.32	-1.43	-1.51	-1.57	-1.62	-1.65	-1.68	-1.69	-1.71	-1.72	-1.72	-1.72	-1.72	-1.73	-1.73	-1.73	-1.73	-1.73	-1.73	-1.73	-1.73	-1.73	-1.73	1939
1940	-0.2	-1.7	-3.7	-5.5	-7.3	-0.88	-1.04	-1.20	-1.33	-1.42	-1.50	-1.55	-1.59	-1.62	-1.65	-1.66	-1.68	-1.68	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	-1.69	1940
1941	-0.2	-1.8	-4.0	-5.8	-7.5	-0.92	-1.09	-1.24	-1.35	-1.44	-1.50	-1.55	-1.59	-1.62	-1.64	-1.66	-1.67	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	-1.68	1941
1942	-0.3	-2.0	-4.4	-6.2	-8.0	-0.99	-1.16	-1.29	-1.39	-1.47	-1.54	-1.58	-1.63	-1.66	-1.68	-1.70	-1.71	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	-1.72	1942
1943	-0.4	-2.6	-5.1	-7.2	-9.3	-1.12	-1.27	-1.40	-1.49	-1.56	-1.63	-1.68	-1.72	-1.75	-1.77	-1.78	-1.80	-1.80	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81	-1.81	1943
1944	-0.4	-2.6	-5.5	-7.9	-1.00	-1.17	-1.31	-1.42	-1.51	-1.59	-1.66	-1.71	-1.75	-1.78	-1.80	-1.82	-1.84	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	-1.85	1944
1945	-0.5	-2.7	-5.9	-8.3	-1.02	-1.19	-1.33	-1.44	-1.54	-1.62	-1.69	-1.74	-1.78	-1.82	-1.84	-1.86	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	1945
1946	-0.5	-3.2	-6.3	-8.6	-1.04	-1.20	-1.34	-1.45	-1.55	-1.63	-1.70	-1.75	-1.80	-1.83	-1.86	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	1946
1947	-0.5	-3.3	-6.2	-8.4	-1.02	-1.20	-1.35	-1.47	-1.57	-1.66	-1.73	-1.78	-1.83	-1.86	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	-1.89	1947
1948	-0.5	-3.1	-5.9	-8.1	-1.00	-1.20	-1.33	-1.44	-1.54	-1.62	-1.69	-1.75	-1.80	-1.84	-1.86	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	-1.87	1948
1949	-0.5	-2.9	-5.6	-7.6	-9.5	-1.12	-1.26	-1.39	-1.49	-1.57	-1.64	-1.70	-1.74	-1.77	-1.79	-1.81	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	-1.82	1949
1950	-0.5	-3.0	-5.7	-7.9	-9.9	-1.17	-1.33	-1.46	-1.58	-1.67	-1.75	-1.82	-1.87	-1.90	-1.92	-1.94	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	1950
1951	-0.5	-2.8	-5.4	-7.4	-9.3	-1.11	-1.26	-1.39	-1.50	-1.59	-1.67	-1.74	-1.80	-1.84	-1.86	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	-1.88	1951
1952	-0.5	-2.8	-5.4	-7.4	-9.4	-1.12	-1.28	-1.41	-1.53	-1.62	-1.70	-1.77	-1.83	-1.87	-1.90	-1.92	-1.93	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	-1.94	1952
1953	-0.5	-2.8	-5.4	-7.6	-9.6	-1.15	-1.32	-1.46	-1.57	-1.66	-1.74	-1.81	-1.87	-1.91	-1.93	-1.94	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	-1.95	1953
1954	-0.5	-2.8	-5.4	-7.6	-9.8	-1.18	-1.35	-1.50	-1.60	-1.69	-1.77	-1.84	-1.90	-1.94	-1.96	-1.97	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	1954
1955	-0.5	-3.0	-5.7	-8.0	-1.02	-1.22	-1.40	-1.58	-1.75	-1.82	-1.90	-1.97	-2.04	-2.11	-2.18	-2.25	-2.32	-2.39	-2.46	-2.53	-2.60	-2.67	-2.74	-2.81	-2.88	-2.95	-3.02	-3.09	-3.16	-3.23	-3.30	1955
1956	-0.5	-3.1	-5.8	-8.3	-1.06	-1.27	-1.49	-1.71	-1.93	-2.15	-2.37	-2.59	-2.81	-3.03	-3.25	-3.47	-3.69	-3.91	-4.13	-4.35	-4.57	-4.79	-5.01	-5.23	-5.45	-5.67	-5.89	-6.11	-6.33	-6.55	-6.77	1956
1957	-0.5	-3.2	-5.9	-8.4	-1.09	-1.31	-1.54	-1.77	-2.00	-2.23	-2.46	-2.69	-2.92	-3.15	-3.38	-3.61	-3.84	-4.07	-4.30	-4.53	-4.76	-4.99	-5.22	-5.45	-5.68	-5.91	-6.14	-6.37	-6.60	-6.83	-7.06	1957
1958	-0.5	-3.3	-6.1	-8.7	-1.12	-1.36	-1.61	-1.86	-2.11	-2.36	-2.61	-2.86	-3.11	-3.36	-3.61	-3.86	-4.11	-4.36	-4.61	-4.86	-5.11	-5.36	-5.61	-5.86	-6.11	-6.36	-6.61	-6.86	-7.11	-7.36	-7.61	1958
1959	-0.5	-3.3	-6.2	-9.0	-1.15	-1.40	-1.66	-1.92	-2.18	-2.44	-2.70	-2.96	-3.22	-3.48	-3.74	-4.00	-4.26	-4.52	-4.78	-5.04	-5.30	-5.56	-5.82	-6.08	-6.34	-6.60	-6.86	-7.12	-7.38	-7.64	-7.90	1959
1960	-0.5	-3.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1960	
1961	-0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1961	

APPENDIX A—continued

Table 1 (e).—Marriage age 30-34

Mean family size

Calendar year of marriage		Marriage duration (exact years)																														Calendar year of marriage	
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
1920-24	.05	.33	.57	.75	.91	1.03	1.13	1.21	1.28	1.33	1.36	1.39	1.41	1.42	1.42	1.43	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1920-24	
1925	.06	.32	.56	.72	.87	.98	1.07	1.13	1.20	1.25	1.28	1.30	1.32	1.33	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1925	
1926	.06	.29	.50	.66	.78	.88	.96	1.02	1.08	1.12	1.14	1.16	1.17	1.18	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1926	
1927	.07	.31	.53	.70	.82	.93	1.03	1.09	1.14	1.18	1.21	1.24	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1927	
1928	.06	.28	.50	.65	.76	.85	.93	.99	1.04	1.07	1.10	1.12	1.13	1.13	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1928	
1929	.06	.28	.49	.63	.75	.84	.92	.99	1.04	1.08	1.11	1.13	1.15	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1929	
1930	.05	.26	.48	.63	.75	.85	.93	.99	1.03	1.08	1.10	1.13	1.14	1.15	1.16	1.16	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1930	
1931	.07	.28	.46	.61	.73	.83	.90	.97	1.02	1.05	1.08	1.10	1.12	1.12	1.13	1.14	1.14	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1931	
1932	.06	.30	.48	.65	.78	.87	.96	1.02	1.08	1.12	1.14	1.17	1.20	1.20	1.22	1.22	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1932
1933	.04	.26	.46	.60	.74	.84	.93	.99	1.04	1.09	1.13	1.17	1.19	1.20	1.22	1.22	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1933
1934	.04	.25	.44	.58	.71	.80	.88	.94	.98	1.02	1.06	1.08	1.10	1.12	1.13	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1934
1935	.04	.25	.46	.60	.72	.81	.89	.95	1.02	1.07	1.10	1.13	1.15	1.17	1.18	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1935
1936	.04	.23	.42	.57	.69	.77	.84	.92	.99	1.05	1.10	1.13	1.15	1.16	1.17	1.17	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1936
1937	.05	.26	.46	.60	.74	.83	.90	.96	1.03	1.09	1.13	1.16	1.18	1.19	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1937
1938	.06	.26	.46	.60	.71	.80	.87	.93	1.02	1.08	1.14	1.18	1.21	1.23	1.24	1.24	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1938
1939	.06	.23	.41	.55	.67	.80	.91	1.00	1.08	1.14	1.18	1.21	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1939
1940	.04	.19	.38	.54	.67	.80	.92	1.01	1.08	1.13	1.16	1.17	1.19	1.19	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1940
1941	.05	.20	.42	.58	.71	.84	.95	1.05	1.11	1.15	1.18	1.19	1.20	1.21	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1941
1942	.04	.19	.39	.53	.69	.84	.96	1.05	1.11	1.16	1.19	1.20	1.21	1.22	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1942
1943	.07	.24	.44	.64	.81	.95	1.06	1.15	1.20	1.24	1.27	1.29	1.30	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1943
1944	.06	.26	.51	.72	.89	1.03	1.13	1.21	1.26	1.30	1.33	1.34	1.36	1.36	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1944
1945	.08	.27	.54	.74	.90	1.03	1.13	1.20	1.26	1.30	1.33	1.35	1.36	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1945
1946	.08	.27	.55	.74	.89	1.01	1.12	1.20	1.25	1.29	1.32	1.34	1.35	1.36	1.36	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1946
1947	.08	.27	.53	.72	.87	.99	1.07	1.17	1.22	1.26	1.29	1.31	1.32	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1947
1948	.08	.25	.50	.68	.84	.97	1.07	1.15	1.21	1.24	1.27	1.29	1.30	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1948
1949	.08	.26	.50	.68	.84	.97	1.08	1.15	1.21	1.26	1.29	1.31	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1949
1950	.08	.31	.57	.76	.93	1.07	1.19	1.28	1.35	1.40	1.43	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1950
1951	.08	.29	.53	.70	.86	.99	1.10	1.18	1.25	1.29	1.32	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1951
1952	.08	.30	.54	.72	.88	1.02	1.13	1.22	1.28	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1952
1953	.08	.29	.53	.72	.88	1.02	1.12	1.21	1.28	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1953
1954	.08	.30	.53	.72	.88	1.02	1.14	1.23	1.30	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1954
1955	.08	.31	.55	.75	.91	1.05	1.17	1.24	1.30	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1955
1956	.08	.31	.58	.79	.97	1.12	1.20	1.26	1.30	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1956
1957	.08	.32	.57	.78	.96	1.10	1.18	1.24	1.28	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1.32	1957
1958	.08	.33	.58	.80	1.00	1.12	1.20	1.26	1.30	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1958
1959	.08	.34	.60	1.00	1.12	1.20	1.26	1.30	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1959
1960	.08	.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1960
1961	.08	.34	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1961

Mean family size

Calendar year of marriage	Marriage duration (exact years)																Marriage duration (exact years)																Calendar year of marriage	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14		15
1920-24	07	28	46	57	66	72	76	79	81	83	84	84	84	85	85	85	85	12	23	29	32	34	36	37	37	38	39	39	40	40	40	41	1920-24	
1925	11	32	46	57	64	68	72	75	77	78	79	80	80	80	80	81	81	22	27	32	35	37	37	38	39	39	39	39	40	40	40	40	1925	
1926	11	31	45	54	60	63	66	68	70	71	72	72	72	73	73	74	74	13	24	28	30	32	33	33	34	34	35	36	36	37	37	37	1926	
1927	08	29	41	50	56	60	63	65	66	67	68	68	68	68	68	68	68	23	34	37	38	38	39	39	39	40	41	42	42	42	42	42	1927	
1928	10	28	41	50	56	59	62	63	64	65	66	66	66	67	67	67	67	07	14	17	19	20	20	20	21	21	21	22	22	22	22	22	1928	
1929	11	28	40	50	54	58	60	62	64	64	65	66	66	66	66	66	66	07	18	20	21	22	22	22	22	23	24	24	24	24	24	24	1929	
1930	07	23	39	48	56	60	64	65	66	67	67	68	68	68	68	68	68	07	17	21	24	24	25	26	27	27	27	27	27	27	27	27	1930	
1931	08	27	40	48	54	61	64	66	67	68	68	68	68	68	68	69	69	12	21	22	24	24	25	25	25	25	26	26	26	26	26	26	1931	
1932	12	28	42	50	54	59	62	63	65	65	66	66	66	66	66	66	66	10	21	22	22	23	23	24	24	24	24	25	25	25	25	25	25	1932
1933	06	24	38	46	50	54	57	58	59	59	60	60	60	60	60	60	61	16	25	26	26	27	27	27	27	27	27	27	27	27	27	27	1933	
1934	08	26	40	49	55	59	62	64	64	65	65	65	66	66	66	66	66	17	28	32	34	35	36	36	36	36	36	36	36	36	36	36	1934	
1935	07	21	31	39	44	47	50	51	53	54	54	54	54	54	54	54	54	17	24	26	26	27	27	27	27	27	27	27	27	27	27	27	1935	
1936	07	24	38	46	53	57	60	63	64	65	66	66	66	66	66	66	66	07	13	16	18	18	19	19	19	20	20	20	20	20	20	20	1936	
1937	08	21	35	44	49	52	54	56	59	60	61	61	61	61	61	61	61	08	11	14	16	17	17	17	18	18	18	18	18	18	18	18	1937	
1938	10	25	37	46	52	56	59	63	65	66	67	67	67	67	67	67	67	07	14	18	20	21	21	21	21	21	21	21	21	21	21	21	1938	
1939	07	19	31	38	45	50	52	56	58	59	59	60	60	60	60	60	60	04	10	13	14	15	15	15	16	16	16	16	16	16	16	16	1939	
1940	08	18	30	38	47	51	55	58	60	61	61	61	61	61	61	61	61	13	16	20	21	22	23	23	24	24	24	24	24	24	24	24	1940	
1941	08	20	33	43	50	56	60	63	65	65	66	66	66	66	66	66	66	11	14	19	21	22	23	24	24	24	24	24	24	24	24	24	1941	
1942	07	18	32	41	48	54	58	61	62	63	63	63	63	63	63	63	63	09	13	19	21	22	23	24	24	24	24	24	24	24	24	24	1942	
1943	07	19	33	43	52	58	62	64	66	66	66	66	67	67	67	67	67	06	12	17	19	21	22	22	22	22	22	22	22	22	22	22	22	1943
1944	09	20	37	49	58	63	67	68	70	70	70	70	70	70	70	70	70	08	13	18	21	22	23	23	23	23	23	23	23	23	23	23	23	1944
1945	09	23	40	53	61	66	70	71	72	73	73	73	73	73	73	73	73	11	15	20	23	24	25	25	25	25	25	25	25	25	25	25	25	1945
1946	09	22	41	52	60	66	69	71	72	73	73	74	74	74	74	74	74	—	11	15	20	23	24	25	25	25	25	25	25	25	25	25	25	1946
1947	09	21	39	50	58	63	66	68	70	70	70	71	71	71	71	71	71	—	11	15	20	22	24	24	24	24	24	24	24	24	24	24	24	1947
1948	09	21	38	49	57	62	65	67	68	69	69	69	69	69	69	69	69	—	11	14	19	21	22	23	23	23	23	23	23	23	23	23	23	1948
1949	09	21	37	48	55	61	64	66	67	68	68	68	68	68	68	68	68	—	11	14	18	20	21	22	22	22	22	22	22	22	22	22	22	1949
1950	09	24	41	52	60	66	70	72	73	74	74	75	75	75	75	75	75	—	11	15	19	21	22	23	23	23	23	23	23	23	23	23	23	1950
1951	09	22	37	48	55	60	63	66	67	67	67	67	67	67	67	67	67	—	11	15	18	20	21	22	22	22	22	22	22	22	22	22	22	1951
1952	09	22	37	47	54	59	62	64	66	66	66	66	66	66	66	66	66	—	11	15	18	20	21	22	22	22	22	22	22	22	22	22	22	1952
1953	09	23	40	50	57	62	66	68	69	69	69	69	69	69	69	69	69	—	11	15	18	20	21	22	22	22	22	22	22	22	22	22	22	1953
1954	09	23	40	50	58	63	67	69	69	69	69	69	69	69	69	69	69	—	11	15	19	22	22	23	23	23	23	23	23	23	23	23	23	1954
1955	09	25	40	51	59	65	69	69	69	69	69	69	69	69	69	69	69	—	11	15	19	21	22	23	23	23	23	23	23	23	23	23	23	1955
1956	09	26	42	54	63	69	69	69	69	69	69	69	69	69	69	69	69	—	11	17	21	23	24	25	25	25	25	25	25	25	25	25	25	1956
1957	09	26	42	55	64	69	69	69	69	69	69	69	69	69	69	69	69	—	11	15	18	20	22	22	22	22	22	22	22	22	22	22	22	1957
1958	09	26	44	57	64	69	69	69	69	69	69	69	69	69	69	69	69	—	11	16	21	23	23	23	23	23	23	23	23	23	23	23	23	1958
1959	09	27	44	57	64	69	69	69	69	69	69	69	69	69	69	69	69	—	11	16	21	23	23	23	23	23	23	23	23	23	23	23	23	1959
1960	09	27	44	57	64	69	69	69	69	69	69	69	69	69	69	69	69	—	11	18	21	23	23	23	23	23	23	23	23	23	23	23	23	1960
1961	09	27	44	57	64	69	69	69	69	69	69	69	69	69	69	69	69	—	11	18	21	23	23	23	23	23	23	23	23	23	23	23	23	1961

APPENDIX A—continued 2. Fertility rates

Table 2 (a).—All marriage ages under 45

Calendar year of marriage	Marriage duration (completed years)																				Fertility rates	
																					Calendar year of marriage	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
1920-24	.367	.297	.222	.189	.164	.146	.128	.118	.101	.087	.076	.065	.057	.050	.044	.037	.030	.026	.022	.018	1920-24	.000
1925	.351	.274	.200	.178	.149	.140	.117	.105	.090	.080	.073	.062	.053	.044	.040	.032	.030	.027	.024	.019	1925	.000
1926	.338	.265	.199	.170	.150	.133	.114	.097	.092	.080	.072	.058	.050	.045	.042	.037	.031	.031	.025	.022	1926	.000
1927	.342	.256	.193	.170	.150	.136	.111	.104	.090	.079	.066	.061	.049	.041	.037	.036	.032	.031	.024	.019	1927	.000
1928	.319	.276	.194	.168	.141	.126	.107	.103	.089	.080	.070	.059	.046	.044	.039	.038	.037	.030	.025	.018	1928	.000
1929	.338	.260	.192	.162	.143	.133	.115	.100	.090	.082	.070	.058	.049	.047	.045	.040	.032	.029	.021	.016	1929	.000
1930	.332	.263	.193	.167	.149	.134	.115	.102	.089	.073	.062	.058	.055	.053	.050	.041	.035	.027	.018	.015	1930	.000
1931	.329	.250	.184	.166	.146	.133	.116	.101	.087	.068	.066	.063	.056	.051	.049	.049	.036	.025	.019	.014	1931	.000
1932	.326	.239	.187	.165	.149	.128	.116	.097	.074	.074	.075	.074	.073	.061	.057	.045	.031	.025	.016	.012	1932	.000
1933	.315	.249	.183	.163	.145	.130	.113	.082	.079	.083	.083	.079	.066	.066	.052	.038	.028	.020	.014	.011	1933	.000
1934	.314	.244	.186	.166	.144	.125	.093	.089	.096	.097	.088	.073	.072	.057	.042	.032	.025	.018	.013	.011	1934	.000
1935	.306	.240	.191	.168	.132	.118	.103	.111	.113	.095	.089	.084	.067	.050	.038	.030	.022	.017	.013	.011	1935	.000
1936	.294	.237	.188	.161	.123	.115	.118	.121	.110	.100	.096	.076	.056	.044	.034	.025	.021	.018	.013	.009	1936	.000
1937	.279	.239	.180	.137	.125	.139	.136	.122	.119	.116	.094	.068	.055	.042	.032	.026	.020	.017	.012	.010	1937	.000
1938	.291	.236	.169	.150	.151	.149	.139	.128	.134	.106	.079	.064	.053	.039	.030	.026	.020	.015	.013	.010	1938	.000
1939	.229	.217	.179	.171	.168	.154	.145	.157	.126	.094	.076	.064	.054	.038	.031	.026	.024	.018	.014	.011	1939	.000
1940	.189	.215	.185	.176	.161	.164	.177	.145	.107	.086	.069	.053	.048	.038	.032	.027	.022	.018	.014	.012	1940	.000
1941	.186	.236	.192	.178	.172	.194	.166	.124	.101	.084	.065	.056	.050	.038	.033	.028	.023	.020	.015	.013	1941	.000
1942	.196	.241	.192	.190	.207	.186	.147	.121	.099	.083	.067	.059	.049	.041	.034	.030	.026	.020	.017	—	1942	.000
1943	.241	.259	.204	.222	.203	.163	.138	.112	.088	.081	.066	.055	.046	.041	.035	.030	.025	.022	—	—	1943	.000
1944	.246	.288	.235	.222	.183	.153	.130	.103	.088	.079	.063	.054	.048	.041	.036	.030	.026	—	—	—	1944	.000
1945	.237	.322	.258	.204	.176	.150	.121	.107	.090	.078	.064	.057	.047	.042	.034	.030	—	—	—	—	1945	.000
1946	.233	.310	.234	.194	.168	.149	.125	.109	.091	.076	.065	.058	.049	.041	.036	—	—	—	—	—	1946	.000
1947	.301	.313	.237	.190	.161	.153	.128	.108	.093	.079	.073	.059	.051	.044	—	—	—	—	—	—	1947	.000
1948	.293	.308	.221	.197	.178	.157	.128	.111	.097	.085	.073	.060	.055	—	—	—	—	—	—	—	1948	.000
1949	.290	.291	.213	.201	.182	.158	.134	.114	.099	.086	.074	.064	—	—	—	—	—	—	—	—	1949	.000
1950	.303	.276	.224	.213	.191	.174	.152	.131	.111	.095	.087	—	—	—	—	—	—	—	—	—	1950	.000
1951	.267	.266	.214	.203	.186	.169	.147	.126	.104	.092	—	—	—	—	—	—	—	—	—	—	1951	.000
1952	.273	.267	.214	.207	.195	.177	.151	.129	.116	—	—	—	—	—	—	—	—	—	—	—	1952	.000
1953	.274	.266	.226	.217	.204	.180	.154	.134	—	—	—	—	—	—	—	—	—	—	—	—	1953	.000
1954	.275	.260	.230	.222	.208	.184	.161	—	—	—	—	—	—	—	—	—	—	—	—	—	1954	.000
1955	.286	.270	.237	.226	.207	.191	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1955	.000
1956	.296	.277	.251	.234	.219	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1956	.000
1957	.298	.279	.252	.249	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1957	.000
1958	.320	.285	.265	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1958	.000
1959	.314	.270	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1959	.000
1960	.328	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1960	.000

Table 2 (b).—Marriage age under 20

Fertility rates

Calendar year of marriage	Marriage duration (completed years)																				Calendar year of marriage
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1920-24	535	352	280	236	219	202	177	179	156	141	139	122	115	104	100	992	079	077	067	061	1920-24
1925	545	307	273	230	198	193	152	162	155	126	123	120	100	100	084	068	086	073	075	064	1925
1926	556	315	256	209	199	182	156	145	146	138	133	111	110	095	090	082	077	076	072	075	1926
1927	580	295	235	213	205	169	155	152	127	149	119	112	104	098	091	093	072	101	075	067	1927
1928	564	342	240	231	186	171	154	160	136	140	112	111	099	102	099	091	096	091	085	066	1928
1929	614	307	248	211	191	170	164	160	144	130	133	119	091	100	090	091	095	084	066	050	1929
1930	596	332	241	219	190	191	168	147	128	139	116	099	106	100	099	079	093	075	056	044	1930
1931	606	292	226	218	199	180	165	152	144	120	118	110	114	107	095	079	089	069	054	044	1931
1932	591	298	244	205	194	172	169	137	128	130	125	127	113	125	128	107	081	075	057	040	1932
1933	595	298	232	205	199	173	154	129	122	133	136	127	131	139	117	091	073	059	046	038	1933
1934	613	297	239	200	197	182	144	148	141	149	146	142	150	128	101	081	067	053	045	038	1934
1935	591	298	246	201	186	169	160	153	155	128	145	151	131	105	085	070	058	052	045	038	1935
1936	581	306	241	216	173	159	170	148	153	159	160	140	113	093	077	065	058	052	044	039	1936
1937	562	298	239	187	182	179	166	163	172	179	154	126	105	089	077	069	063	056	046	041	1937
1938	580	312	229	194	195	173	158	184	182	152	124	106	096	078	069	062	055	047	043	038	1938
1939	412	265	233	194	191	190	184	216	178	142	122	110	101	076	071	061	060	049	043	038	1939
1940	308	267	219	186	187	208	228	196	146	124	110	094	086	072	066	058	052	048	039	036	1940
1941	289	272	216	198	208	231	225	169	140	127	111	097	086	066	063	057	052	045	038	036	1941
1942	280	252	229	221	251	237	187	157	134	114	107	093	082	070	063	060	052	043	042	—	1942
1943	318	274	242	234	246	205	174	147	127	115	102	085	074	067	061	055	048	044	—	—	1943
1944	346	302	285	269	225	193	168	134	118	109	099	084	079	068	060	057	053	—	—	—	1944
1945	311	358	305	253	217	191	167	149	128	110	100	091	083	073	063	060	—	—	—	—	1945
1946	382	386	285	238	209	192	173	153	131	119	111	098	085	073	070	—	—	—	—	—	1946
1947	429	376	274	238	209	193	169	148	135	122	116	100	089	081	—	—	—	—	—	—	1947
1948	440	363	268	247	221	205	173	151	139	131	117	099	094	—	—	—	—	—	—	—	1948
1949	449	359	274	258	229	203	178	154	141	128	116	105	—	—	—	—	—	—	—	—	1949
1950	481	315	281	265	234	221	199	176	156	138	135	—	—	—	—	—	—	—	—	—	1950
1951	429	318	277	258	238	214	194	169	148	134	—	—	—	—	—	—	—	—	—	—	1951
1952	437	318	272	260	244	219	195	169	160	—	—	—	—	—	—	—	—	—	—	—	1952
1953	444	316	278	268	251	222	191	169	—	—	—	—	—	—	—	—	—	—	—	—	1953
1954	432	314	277	263	250	221	197	—	—	—	—	—	—	—	—	—	—	—	—	—	1954
1955	418	317	284	265	235	219	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1955
1956	424	326	295	267	249	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1956
1957	420	327	297	282	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1957
1958	433	331	303	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1958
1959	439	330	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1959
1960	468	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1960

Table 2 (c).—Marriage age 20-24

APPENDIX A—continued

Table 2 (c).—Marriage age 20-24																			Fertility rates													
Calendar year of marriage	Marriage duration (completed years)																		Calendar year of marriage													
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
1920-24	409	319	242	206	182	165	146	135	120	105	092	080	072	064	057	049	041	034	029	024	018	012	009	006	003	001	001	000	000	000	000	000
1925	401	297	221	198	160	164	130	121	106	097	087	077	071	055	054	046	042	038	033	027	019	014	009	005	002	001	000	000	000	000	000	000
1926	382	289	215	190	172	151	130	112	110	095	087	073	068	057	056	049	045	045	034	028	022	015	009	005	002	002	000	000	000	000	000	000
1927	389	280	211	192	169	143	123	123	107	092	087	072	061	051	046	047	044	040	032	024	018	011	007	004	002	001	000	000	000	000	000	000
1928	355	301	212	184	159	142	123	121	106	093	087	072	057	054	047	050	049	038	030	022	016	011	007	002	002	000	000	000	000	000	000	000
1929	383	287	208	176	160	149	132	115	107	099	080	068	063	056	061	052	038	035	026	020	015	008	005	003	002	000	000	000	000	000	000	000
1930	369	288	207	182	166	147	128	112	104	083	072	071	066	068	063	055	043	033	023	018	012	007	005	003	002	001	000	000	000	000	000	000
1931	362	279	198	179	160	150	129	115	098	080	078	075	081	073	068	062	046	032	025	017	009	007	005	002	001	001	000	000	000	000	000	000
1932	360	270	200	182	163	142	131	112	084	085	089	087	092	077	070	054	038	029	021	014	011	007	005	002	001	000	000	000	000	000	000	000
1933	345	272	199	176	156	145	132	096	093	093	099	095	083	084	065	047	037	026	018	014	010	007	003	002	001	000	000	000	000	000	000	000
1934	345	263	203	184	156	138	106	103	116	114	102	089	088	069	052	040	032	024	017	014	009	006	004	002	001	000	000	000	000	000	000	000
1935	336	263	204	186	146	115	120	130	129	111	109	105	084	062	050	039	030	023	017	014	009	006	004	002	001	000	000	000	000	000	000	000
1936	332	252	203	174	139	125	130	134	128	120	115	092	070	055	045	033	028	023	017	012	008	006	004	002	001	000	000	000	000	000	000	000
1937	301	258	192	154	139	149	149	132	137	134	109	082	067	054	040	032	026	021	015	012	008	005	003	002	001	000	000	000	000	000	000	000
1938	298	254	176	167	164	163	153	142	153	122	093	077	066	048	037	031	026	019	015	012	008	006	004	002	001	000	000	000	000	000	000	000
1939	228	226	190	186	184	168	160	175	141	106	088	074	063	044	036	031	028	021	016	012	008	006	004	002	001	000	000	000	000	000	000	000
1940	189	222	192	189	175	174	197	160	119	098	079	059	055	043	037	031	026	021	016	012	009	006	004	002	001	000	000	000	000	000	000	000
1941	179	248	205	191	184	210	181	135	111	095	071	062	057	045	039	031	027	022	017	013	009	006	004	002	001	000	000	000	000	000	000	000
1942	192	258	202	191	223	199	158	133	110	092	074	064	055	045	039	033	028	023	018	013	009	006	004	002	001	000	000	000	000	000	000	000
1943	244	280	202	236	207	176	149	123	096	088	071	060	051	046	040	034	028	025	018	013	009	006	004	002	001	000	000	000	000	000	000	000
1944	241	303	269	234	192	163	139	112	095	085	068	059	051	046	040	033	027	021	016	011	008	006	004	002	001	000	000	000	000	000	000	000
1945	240	336	269	213	184	159	128	112	096	084	069	062	051	045	038	033	027	021	016	011	008	006	004	002	001	000	000	000	000	000	000	000
1946	297	348	246	206	180	163	135	118	099	083	073	064	056	047	042	036	030	024	018	013	009	006	004	002	001	000	000	000	000	000	000	000
1947	311	326	235	199	180	162	136	110	100	086	078	066	056	050	044	038	032	026	020	015	011	008	006	004	002	001	000	000	000	000	000	000
1948	297	306	227	203	183	166	135	119	105	091	078	066	060	050	044	038	032	026	020	015	011	008	006	004	002	001	000	000	000	000	000	000
1949	289	298	215	206	188	166	141	122	106	091	080	068	059	051	044	038	032	026	020	015	011	008	006	004	002	001	000	000	000	000	000	000
1950	290	282	224	218	200	185	161	140	118	102	092	081	072	063	054	045	036	030	024	019	015	011	008	006	004	002	001	000	000	000	000	000
1951	249	267	213	207	191	177	155	134	111	098	087	078	069	060	051	042	033	027	021	016	012	009	006	004	002	001	000	000	000	000	000	000
1952	253	269	212	212	202	186	159	137	122	105	094	085	076	067	058	049	040	034	028	023	018	014	011	008	006	004	002	001	000	000	000	000
1953	249	264	225	222	209	189	163	142	125	108	097	088	079	070	061	052	043	037	031	025	020	016	012	009	006	004	002	001	000	000	000	000
1954	249	254	228	225	214	192	168	148	128	110	099	090	081	072	063	054	045	038	032	026	021	017	013	010	007	005	003	002	001	000	000	000
1955	260	264	237	229	216	201	178	155	134	111	098	089	080	071	062	053	044	037	031	025	020	016	012	009	006	004	002	001	000	000	000	000
1956	267	270	248	237	226	201	178	155	134	111	098	089	080	071	062	053	044	037	031	025	020	016	012	009	006	004	002	001	000	000	000	000
1957	268	272	246	251	221	201	178	155	134	111	098	089	080	071	062	053	044	037	031	025	020	016	012	009	006	004	002	001	000	000	000	000
1958	275	276	261	231	201	178	155	134	111	098	089	080	071	062	053	044	037	031	025	020	016	012	009	006	004	002	001	000	000	000	000	000
1959	278	246	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	000
1960	283	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	000

Table 2 (d).—Marriage age 25-29

Calendar year of marriage	Marriage duration (exact years)																				Calendar year of marriage
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1920-24	302	285	205	175	149	130	112	102	083	070	056	047	036	030	023	016	010	007	005	003	1920-24
1925	263	261	173	160	143	118	114	086	072	062	060	040	032	027	019	012	008	007	004	001	1925
1926	254	247	190	156	128	125	100	084	071	064	083	041	029	026	020	019	008	006	005	004	1926
1927	244	236	178	151	132	108	105	086	077	065	081	048	031	028	021	017	011	007	006	005	1927
1928	238	231	180	154	132	112	093	084	077	065	084	040	030	026	021	017	012	008	008	006	1928
1929	233	238	181	154	132	125	097	084	069	065	055	040	033	022	021	021	014	012	007	005	1929
1930	245	231	182	156	136	126	104	100	078	057	046	042	040	035	026	022	016	010	007	005	1930
1931	233	229	174	156	132	125	104	088	074	052	049	047	046	033	025	024	015	009	006	002	1931
1932	230	217	173	151	132	120	101	080	059	061	057	059	054	036	034	025	015	009	004	002	1932
1933	227	231	174	153	137	120	097	064	061	073	065	062	043	037	028	019	012	006	003	001	1933
1934	224	228	172	155	139	112	080	070	083	082	078	053	046	036	024	017	011	005	003	002	1934
1935	226	230	184	163	119	102	085	053	109	089	070	061	044	031	022	014	008	005	003	002	1935
1936	218	235	175	153	109	110	110	130	096	081	079	057	038	027	018	012	008	005	003	001	1936
1937	216	233	175	153	109	111	141	139	123	108	105	081	054	037	027	017	012	007	005	002	1937
1938	216	208	156	134	144	149	139	123	125	097	068	049	038	025	017	012	007	004	003	001	1938
1939	178	204	168	165	161	144	135	142	112	080	061	046	036	024	017	013	009	005	003	001	1939
1940	153	195	185	178	147	158	161	131	095	074	054	038	034	025	017	012	007	005	003	002	1940
1941	187	219	180	174	163	175	148	110	088	066	045	040	032	022	015	012	008	004	003	002	1941
1942	170	236	177	187	188	164	130	104	081	065	049	041	031	022	016	012	008	005	003	001	1942
1943	217	249	214	212	187	152	123	097	069	064	049	041	030	023	016	012	006	006	006	006	1943
1944	215	290	248	205	168	141	114	090	078	069	048	039	033	025	019	012	010	010	010	010	1944
1945	213	319	245	193	167	139	110	099	081	068	053	041	034	026	018	013	013	013	013	013	1945
1946	262	317	223	185	158	137	113	101	081	066	055	045	035	027	020	015	015	015	015	015	1946
1947	272	298	219	182	171	155	121	102	083	069	057	045	035	029	020	015	015	015	015	015	1947
1948	255	283	217	187	173	148	118	100	084	070	057	046	038	029	020	015	015	015	015	015	1948
1949	238	268	201	185	172	147	120	102	083	070	056	046	038	029	020	015	015	015	015	015	1949
1950	249	269	216	203	178	158	136	113	095	078	069	053	041	034	026	018	013	013	013	013	1950
1951	225	257	204	192	176	154	130	108	088	077	069	057	045	035	027	020	015	015	015	015	1951
1952	227	257	206	193	179	162	135	113	098	081	069	057	045	035	027	020	015	015	015	015	1952
1953	225	257	220	204	193	165	137	118	098	081	069	057	045	035	027	020	015	015	015	015	1953
1954	228	255	228	215	200	172	148	120	098	081	069	057	045	035	027	020	015	015	015	015	1954
1955	231	260	224	222	196	179	158	136	113	095	078	069	053	041	034	026	018	013	013	013	1955
1956	238	269	247	231	208	181	158	136	113	095	078	069	053	041	034	026	018	013	013	013	1956
1957	262	272	251	246	218	195	172	148	120	098	081	069	057	045	035	027	020	015	015	015	1957
1958	275	280	264	246	218	195	172	148	120	098	081	069	057	045	035	027	020	015	015	015	1958
1959	277	289	264	246	218	195	172	148	120	098	081	069	057	045	035	027	020	015	015	015	1959
1960	292	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1960

APPENDIX A—continued

Table 2 (e).—Marriage age 30-34

Fertility rates

Calendar year of marriage	Marriage duration (exact years)																				Calendar year of marriage
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1920-24	.276	.244	.182	.152	.121	.103	.082	.068	.046	.036	.025	.021	.012	.007	.005	.004	.002	.002	.001	.001	.000
1925	.268	.238	.160	.144	.116	.083	.068	.063	.050	.032	.025	.019	.010	.005	.002	.002	.001	.001	.000	.001	.000
1926	.228	.207	.156	.121	.109	.072	.063	.057	.044	.021	.020	.008	.007	.007	.004	.000	.001	.000	.001	.000	.000
1927	.221	.221	.164	.130	.101	.100	.062	.055	.038	.031	.020	.015	.007	.002	.001	.000	.002	.001	.001	.000	.000
1928	.211	.222	.151	.114	.084	.082	.059	.054	.027	.031	.019	.010	.006	.003	.004	.002	.002	.002	.001	.000	.000
1929	.226	.208	.135	.119	.094	.081	.070	.047	.045	.031	.018	.016	.007	.001	.002	.001	.003	.002	.001	.000	.000
1930	.207	.220	.153	.118	.104	.076	.062	.044	.041	.038	.024	.015	.009	.005	.006	.004	.004	.002	.001	.000	.000
1931	.211	.188	.123	.122	.098	.073	.072	.049	.029	.027	.023	.015	.007	.006	.006	.006	.004	.002	.001	.000	.000
1932	.239	.188	.163	.132	.097	.082	.067	.052	.039	.027	.023	.019	.008	.003	.002	.003	.003	.002	.001	.000	.000
1933	.223	.194	.139	.135	.101	.091	.061	.049	.035	.035	.039	.023	.011	.008	.003	.003	.003	.001	.000	.000	.000
1934	.210	.194	.142	.123	.096	.078	.055	.048	.033	.038	.026	.019	.017	.012	.008	.005	.002	.000	.000	.000	.000
1935	.211	.206	.148	.117	.092	.076	.060	.067	.052	.036	.028	.023	.015	.010	.007	.002	.001	.000	.000	.000	.000
1936	.196	.189	.151	.117	.080	.074	.077	.075	.060	.042	.031	.022	.013	.008	.004	.002	.000	.000	.000	.000	.000
1937	.207	.200	.140	.098	.088	.090	.089	.073	.055	.042	.029	.019	.012	.005	.002	.002	.000	.000	.000	.000	.000
1938	.202	.207	.130	.116	.103	.115	.093	.061	.061	.042	.025	.017	.010	.005	.002	.002	.000	.000	.000	.000	.000
1939	.171	.184	.134	.122	.133	.113	.083	.085	.061	.037	.023	.014	.009	.004	.002	.001	.000	.000	.000	.000	.000
1940	.150	.189	.156	.133	.135	.113	.094	.071	.047	.029	.017	.012	.008	.004	.002	.001	.000	.000	.000	.000	.000
1941	.154	.215	.159	.130	.126	.118	.094	.063	.042	.028	.014	.011	.009	.003	.002	.001	.000	.000	.000	.000	.000
1942	.152	.198	.142	.160	.148	.121	.090	.063	.043	.029	.016	.012	.009	.004	.002	.001	.000	.000	.000	.000	.000
1943	.171	.202	.194	.172	.143	.111	.083	.057	.037	.028	.017	.013	.006	.004	.002	.001	.000	.000	.000	.000	.000
1944	.202	.248	.212	.170	.134	.105	.080	.052	.038	.027	.016	.011	.007	.004	.003	.001	.000	.000	.000	.000	.000
1945	.188	.272	.205	.157	.129	.101	.071	.057	.039	.030	.019	.012	.007	.004	.001	.001	.000	.000	.000	.000	.000
1946	.194	.277	.190	.152	.122	.104	.077	.058	.041	.027	.019	.013	.007	.003	.002	.002	.000	.000	.000	.000	.000
1947	.191	.263	.187	.149	.121	.101	.076	.056	.040	.027	.019	.012	.008	.004	.001	.000	.000	.000	.000	.000	.000
1948	.175	.247	.183	.153	.130	.105	.076	.058	.038	.030	.020	.011	.008	.001	.000	.000	.000	.000	.000	.000	.000
1949	.176	.243	.177	.160	.131	.109	.077	.062	.044	.029	.021	.013	.001	.000	.000	.000	.000	.000	.000	.000	.000
1950	.230	.259	.190	.169	.144	.117	.087	.071	.050	.036	.025	.019	.013	.007	.003	.002	.001	.000	.000	.000	.000
1951	.207	.240	.174	.155	.137	.109	.084	.061	.046	.030	.025	.019	.013	.007	.003	.002	.001	.000	.000	.000	.000
1952	.217	.245	.178	.163	.136	.114	.085	.065	.055	.039	.025	.019	.012	.008	.004	.001	.000	.000	.000	.000	.000
1953	.212	.243	.186	.157	.141	.107	.086	.067	.055	.039	.025	.019	.012	.008	.004	.001	.000	.000	.000	.000	.000
1954	.218	.229	.191	.164	.142	.112	.090	.071	.055	.039	.025	.019	.012	.008	.004	.001	.000	.000	.000	.000	.000
1955	.234	.237	.198	.162	.138	.119	.087	.071	.050	.036	.025	.019	.013	.007	.003	.002	.001	.000	.000	.000	.000
1956	.250	.247	.212	.177	.150	.119	.087	.071	.050	.036	.025	.019	.013	.007	.003	.002	.001	.000	.000	.000	.000
1957	.243	.250	.206	.183	.150	.119	.087	.071	.050	.036	.025	.019	.013	.007	.003	.002	.001	.000	.000	.000	.000
1958	.247	.257	.218	.183	.150	.119	.087	.071	.050	.036	.025	.019	.013	.007	.003	.002	.001	.000	.000	.000	.000
1959	.264	.261	.218	.183	.150	.119	.087	.071	.050	.036	.025	.019	.013	.007	.003	.002	.001	.000	.000	.000	.000
1960	.265	.261	.218	.183	.150	.119	.087	.071	.050	.036	.025	.019	.013	.007	.003	.002	.001	.000	.000	.000	.000

Table 2 (g).—Marriage age 40-44

Fertility rates

Calendar year of marriage	Marriage duration (completed years)															Marriage duration (completed years)															Calendar year of marriage			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	0	1	2	3	4	5	6	7	8	9	10	11	12	13		14		
1920-24	.213	.176	.108	.092	.062	.041	.029	.021	.015	.007	.007	.003	.002	.002	.000	.001	.117	.058	.029	.023	.015	.010	.006	.011	.006	.003	.005	.003	.002	.001	1920-24			
1925	.216	.141	.108	.066	.047	.036	.031	.023	.008	.009	.008	.001	.002	.001	.002	.001	.048	.056	.029	.017	.002	.007	.012	.000	.000	.000	.000	.000	.000	.000	.000	.000	1925	
1926	.199	.142	.083	.061	.031	.030	.026	.013	.007	.009	.008	.002	.003	.003	.003	.001	.109	.034	.028	.013	.008	.004	.007	.006	.003	.013	.006	.000	.003	.004	.000	.000	1926	
1927	.208	.124	.088	.059	.038	.029	.019	.012	.010	.007	.001	.003	.000	.002	.003	.001	.107	.030	.008	.005	.007	.004	.002	.011	.006	.007	.004	.000	.000	.000	.000	.000	1927	
1928	.182	.131	.089	.064	.045	.034	.013	.008	.010	.008	.003	.003	.004	.002	.001	.000	.065	.037	.012	.010	.005	.002	.003	.000	.006	.000	.004	.003	.000	.000	.000	.000	1928	
1929	.177	.118	.094	.047	.038	.017	.027	.017	.003	.004	.008	.003	.002	.004	.000	.000	.106	.020	.009	.007	.006	.000	.001	.006	.000	.000	.003	.000	.002	.003	.000	.000	1929	
1930	.160	.156	.092	.078	.045	.039	.014	.007	.003	.003	.001	.002	.000	.000	.000	.000	.108	.038	.023	.009	.009	.010	.004	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	1930
1931	.187	.125	.082	.065	.067	.033	.016	.011	.008	.007	.000	.001	.000	.002	.000	.000	.087	.013	.015	.005	.000	.004	.000	.004	.004	.003	.000	.000	.000	.000	.000	.000	.000	1931
1932	.160	.131	.085	.041	.045	.030	.018	.015	.004	.005	.000	.000	.000	.001	.001	.000	.109	.007	.007	.004	.005	.001	.007	.000	.004	.003	.000	.000	.000	.000	.000	.000	.000	1932
1933	.178	.140	.076	.043	.037	.032	.010	.013	.001	.005	.001	.002	.002	.001	.000	.000	.097	.006	.003	.006	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1933
1934	.180	.143	.086	.059	.041	.031	.021	.003	.002	.005	.002	.003	.002	.002	.000	.000	.114	.038	.020	.014	.002	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1934
1935	.136	.107	.072	.057	.029	.029	.011	.016	.007	.072	.001	.002	.002	.001	.001	.000	.078	.010	.009	.006	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1935
1936	.166	.137	.085	.067	.041	.027	.032	.013	.013	.006	.004	.002	.002	.001	.000	.000	.061	.029	.014	.005	.010	.001	.002	.003	.002	.000	.000	.000	.000	.000	.000	.000	.000	1936
1937	.134	.134	.094	.044	.030	.024	.024	.028	.010	.005	.004	.002	.001	.000	.000	.000	.032	.026	.019	.008	.007	.002	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	1937
1938	.151	.124	.087	.058	.043	.033	.039	.017	.011	.006	.004	.002	.000	.000	.000	.000	.077	.031	.024	.008	.033	.002	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	1938
1939	.123	.118	.076	.063	.056	.023	.035	.018	.011	.005	.002	.001	.000	.000	.000	.000	.053	.031	.009	.013	.004	.000	.004	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	1939
1940	.103	.124	.077	.093	.042	.036	.029	.019	.009	.004	.001	.001	.000	.000	.000	.000	.026	.041	.014	.010	.005	.006	.002	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	1940
1941	.107	.137	.095	.076	.056	.044	.029	.015	.006	.003	.001	.001	.000	.000	.000	.000	.033	.045	.023	.017	.010	.003	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1941
1942	.109	.137	.089	.071	.065	.043	.025	.015	.005	.002	.002	.000	.000	.000	.000	.000	.041	.055	.024	.012	.007	.005	.002	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	1942
1943	.116	.145	.102	.089	.062	.038	.022	.012	.005	.003	.002	.000	.000	.000	.000	.000	.056	.050	.023	.016	.008	.004	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1943
1944	.112	.171	.120	.086	.056	.034	.019	.010	.006	.002	.001	.000	.000	.000	.000	.000	.047	.046	.029	.016	.007	.003	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1944
1945	.140	.176	.122	.081	.056	.033	.016	.010	.006	.002	.001	.000	.000	.000	.000	.000	.040	.049	.030	.014	.007	.003	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1945
1946	.136	.183	.113	.082	.053	.035	.021	.012	.006	.003	.002	.000	.000	.000	.000	.000	.040	.051	.028	.014	.007	.003	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1946
1947	.125	.174	.114	.076	.049	.034	.021	.014	.006	.003	.001	.000	.000	.000	.000	.000	.038	.050	.029	.012	.005	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1947
1948	.121	.169	.110	.077	.050	.034	.020	.010	.006	.003	.001	.000	.000	.000	.000	.000	.036	.047	.023	.006	.006	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1948
1949	.121	.160	.105	.079	.053	.037	.020	.010	.005	.004	.001	.000	.000	.000	.000	.000	.036	.040	.021	.007	.006	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1949
1950	.152	.172	.110	.081	.057	.036	.021	.015	.006	.004	.002	.000	.000	.000	.000	.000	.045	.034	.025	.008	.006	.003	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1950
1951	.130	.155	.101	.075	.050	.030	.019	.012	.005	.002	.000	.000	.000	.000	.000	.000	.042	.033	.020	.007	.004	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1951
1952	.132	.151	.095	.072	.048	.035	.021	.012	.006	.000	.000	.000	.000	.000	.000	.000	.039	.035	.024	.009	.004	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1952
1953	.145	.164	.098	.078	.048	.036	.020	.012	.000	.000	.000	.000	.000	.000	.000	.000	.041	.035	.020	.009	.004	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1953
1954	.145	.161	.109	.076	.052	.036	.023	.000	.000	.000	.000	.000	.000	.000	.000	.000	.042	.043	.022	.010	.005	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1954
1955	.160	.156	.106	.083	.060	.040	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.040	.039	.024	.013	.006	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1955
1956	.168	.167	.120	.081	.060	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.059	.039	.021	.011	.008	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1956
1957	.167	.163	.128	.093	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.041	.035	.020	.011	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1957
1958	.173	.159	.124	.095	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.055	.045	.024	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1958
1959	.181	.171	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.053	.045	.024	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1959
1960	.182	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.071	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	1960

APPENDIX B

FERTILITY RATES BY BIRTH ORDER, ENGLAND AND WALES

Live births per woman married once only at integral marriage durations irrespective of parity

Note—Figures are rounded and may not add to totals

1951/52

Calendar year of marriage	Marriage duration in completed years	Age at marriage																			
		All ages under 45						Under 20						20-24				25-29			
		Number of previous children						Number of previous children						Number of previous children				Number of previous children			
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more		
1951	0	-267	-263	-003	-000	-000	-000	-429	-426	-003	-000	-000	-000	-225	-219	-005	-001	-000	-000		
1950	1	-276	-219	-054	-002	-000	-000	-315	-225	-088	-002	-000	-000	-269	-223	-041	-003	-001	-000		
1949	2	-213	-103	-097	-012	-001	-000	-274	-100	-152	-021	-001	-000	-201	-107	-082	-010	-001	-001		
1948	3	-197	-068	-097	-028	-003	-001	-247	-059	-131	-051	-005	-000	-192	-075	-092	-021	-003	-001		
1947	4	-171	-046	-082	-034	-009	-001	-209	-036	-097	-057	-017	-002	-171	-051	-083	-029	-007	-002		
1946	5	-149	-032	-066	-034	-012	-004	-192	-026	-077	-056	-025	-008	-137	-033	-063	-029	-009	-003		
1945	6	-121	-021	-049	-032	-013	-006	-167	-018	-055	-051	-028	-015	-110	-022	-047	-027	-010	-005		
1944	7	-103	-014	-037	-028	-014	-009	-134	-012	-038	-039	-026	-019	-090	-015	-035	-023	-011	-006		
1943	8	-088	-010	-028	-023	-014	-011	-127	-008	-030	-037	-026	-026	-069	-009	-024	-019	-010	-007		
1942	9	-083	-008	-023	-023	-014	-014	-114	-006	-024	-031	-024	-029	-065	-008	-020	-019	-010	-009		
1941	10	-065	-005	-016	-018	-012	-014	-111	-005	-020	-029	-024	-033	-045	-004	-012	-013	-008	-008		
1940	11	-053	-003	-011	-014	-010	-014	-094	-004	-015	-023	-020	-032	-038	-003	-009	-011	-007	-008		
1939	12	-054	-003	-010	-014	-011	-016	-101	-004	-015	-024	-021	-037	-036	-003	-007	-010	-007	-009		
1938	13	-039	-002	-006	-010	-008	-013	-078	-003	-010	-018	-017	-031	-025	-001	-004	-006	-005	-008		
1937	14	-032	-001	-005	-008	-007	-011	-077	-002	-009	-018	-016	-032	-017	-001	-003	-005	-004	-005		
1936	15	-025	-001	-003	-006	-005	-009	-065	-002	-007	-014	-013	-029	-012	-001	-002	-003	-003	-004		
1935	16	-022	-001	-003	-005	-005	-009	-058	-002	-005	-012	-012	-027	-008	-000	-001	-002	-002	-003		
1934	17	-018	-001	-002	-004	-004	-008	-053	-001	-004	-010	-011	-027	-005	-000	-001	-001	-001	-002		
1933	18	-014	-000	-001	-003	-003	-007	-046	-001	-003	-008	-009	-026	-003	-000	-000	-001	-001	-002		
1932	19	-012	-000	-001	-002	-002	-007	-040	-000	-002	-005	-007	-025	-002	-000	-000	-000	-000	-001		
1931	20	-008	-000	-000	-001	-001	-005	-037	-000	-002	-004	-006	-025	-009	-000	-000	-000	-000	-001		
1930	21	-007	-000	-000	-001	-001	-005	-031	-000	-001	-003	-005	-022	-007	-000	-000	-000	-000	-001		

1951/52—continued

Calendar year of marriage	Marriage duration in completed years	Age at marriage											
		30-34				35-39				40-44			
		Number of previous children											
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more
1951	0	.207	.200	.005	.001	.001	.000	.130	.125	.003	.001	.001	.000
1950	1	.259	.213	.039	.005	.001	.001	.172	.145	.023	.002	.001	.001
1949	2	.177	.088	.076	.010	.002	.001	.105	.056	.042	.005	.001	.001
1948	3	.153	.053	.075	.020	.004	.002	.077	.029	.036	.009	.002	.001
1947	4	.121	.033	.057	.023	.006	.002	.049	.015	.021	.008	.003	.002
1946	5	.104	.025	.045	.023	.009	.003	.035	.009	.014	.009	.003	.001
1945	6	.071	.013	.028	.019	.007	.004	.016	.004	.006	.004	.001	.001
1944	7	.052	.008	.019	.013	.007	.004	.010	.002	.003	.002	.001	.001
1943	8	.037	.005	.011	.010	.006	.005	.005	.001	.001	.002	.001	.001
1942	9	.029	.004	.008	.007	.005	.005	.002	.000	.000	.001	.000	.000
1941	10	.014	.001	.004	.004	.002	.003	.001	.000	.000	.000	.000	.000
1940	11	.012	.001	.003	.003	.002	.002	.001	.000	.000	.000	.000	.000
1939	12	.009	.001	.002	.002	.002	.003	—	—	—	—	—	—
1938	13	.005	.000	.001	.001	.001	.002	—	—	—	—	—	—
1937	14	.002	.000	.000	.001	.000	.001	—	—	—	—	—	—
1936	15	.001	.000	.000	.000	.000	.001	—	—	—	—	—	—

APPENDIX B—continued 1952/53

Calendar year of marriage	Marriage duration in completed years	Age at marriage																								
		All ages under 45						Under 20						20-24						25-29						
		Number of previous children																								
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	
1952	0	273	269	-003	-000	-000	-000	-437	434	-003	-000	-000	-000	-000	253	249	-003	-000	-000	-000	227	221	-005	-001	-000	-000
1951	1	266	211	-052	-002	-000	-000	-318	227	-089	-002	-000	-000	-000	267	219	-045	-002	-000	-000	257	213	-039	-003	-001	-000
1950	2	224	108	-102	-012	-001	-000	-281	103	-156	-021	-001	-000	-000	224	118	-095	-010	-001	-000	216	-115	-089	-010	-001	-001
1949	3	201	-070	-099	-028	-004	-001	-258	-061	-137	-054	-006	-000	-000	206	-079	-099	-025	-003	-000	185	-072	-088	-021	-003	-001
1948	4	178	-047	-085	-035	-009	-002	-221	-038	-103	-060	-018	-002	-000	185	-055	-089	-032	-008	-001	173	-051	-084	-029	-007	-002
1947	5	153	033	-068	-035	-013	-004	-193	-026	-077	-057	-025	-008	-000	162	-039	-075	-034	-011	-003	155	-038	-071	-032	-010	-004
1946	6	125	022	-050	-033	-014	-007	-173	-019	-057	-053	-029	-015	-000	135	-026	-057	-033	-013	-006	113	-022	-048	-028	-010	-005
1945	7	107	015	-039	-029	-015	-010	-149	-013	-042	-044	-029	-021	-000	112	-017	-043	-030	-013	-008	099	-016	-039	-025	-012	-007
1944	8	088	010	-028	-025	-014	-011	-118	-008	-028	-034	-024	-024	-000	095	-012	-033	-026	-013	-010	078	-011	-028	-021	-011	-008
1943	9	081	-008	-023	-023	-014	-014	-115	-006	-024	-031	-024	-029	-000	088	-009	-027	-025	-014	-013	064	-008	-019	-019	-010	-009
1942	10	067	-005	-016	-019	-013	-014	-107	005	-019	-028	-023	-032	-000	074	006	-019	-021	-013	-014	049	005	-013	-014	-009	-008
1941	11	056	004	-012	-015	-011	-014	-097	-004	-015	-024	-021	-033	-000	062	-004	-014	-017	-012	-014	040	-003	-009	-011	-008	-009
1940	12	048	003	-009	-013	-010	-014	-086	-003	-012	-021	-018	-032	-000	055	-003	-011	-015	-011	-014	034	-002	-007	-009	-007	-009
1939	13	038	002	-006	-010	-008	-012	-076	-003	-010	-017	-016	-030	-000	044	-002	-008	-012	-009	-013	024	-001	-004	-006	-005	-007
1938	14	030	-001	-005	-008	-006	-010	-069	-002	-008	-016	-014	-029	-000	037	-002	-006	-010	-008	-012	017	-001	-003	-005	-004	-005
1937	15	026	-001	-003	-006	-005	-010	-069	002	-007	-015	-014	-031	-000	032	001	-005	-008	-007	-011	012	-001	-002	-003	-003	-004
1936	16	021	001	-003	-005	-004	-008	-058	002	-005	-012	-012	-027	-000	028	-001	-004	-007	-006	-010	008	-000	-001	-002	-002	-003
1935	17	017	001	-002	-004	-004	-008	-052	-001	-004	-010	-010	-027	-000	023	001	-003	-005	-005	-009	005	-000	-001	-001	-001	-002
1934	18	013	-000	-001	-003	-003	-007	-045	-001	-003	-007	-008	-026	-017	017	-000	-002	-004	-004	-008	003	-000	-000	-001	-001	-001
1933	19	011	-000	-001	-002	-002	-006	-038	-000	-002	-005	-006	-025	-014	014	-000	-001	-003	-003	-007	002	-000	-000	-000	-000	-001
1932	20	009	-000	-000	-001	-002	-006	-038	-000	-002	-004	-006	-026	-000	011	-000	-001	-002	-002	-006	001	-000	-000	-000	-000	-001
1931	21	005	-000	-000	-001	-001	-004	-028	-000	-001	-003	-004	-020	-000	007	-000	-000	-001	-001	-004	000	-000	-000	-000	-000	-001
1930	22	005	-000	-000	-000	-001	-004	-024	-000	-001	-002	-003	-018	-000	005	-000	-000	-001	-001	-003	000	-000	-000	-000	-000	-001

1952/53—continued

Calendar year of marriage	Age at marriage																			
	30-34								35-39								40-44			
	Number of previous children																			
	Total		0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	
1952	0	.217	.210	.005	.001	.001	.000	.132	.127	.003	.001	.001	.000	.039	.038	.001	.000	.000	.000	
1951	1	.240	.198	.036	.004	.001	.001	.155	.131	.021	.002	.001	.001	.033	.029	.003	.000	.000	.000	
1950	2	.190	.094	.082	.010	.002	.001	.110	.059	.044	.003	.001	.001	.025	.017	.007	.001	.000	.001	
1949	3	.160	.056	.078	.021	.004	.002	.079	.030	.037	.009	.002	.001	.007	.004	.002	.001	.000	.000	
1948	4	.130	.036	.061	.024	.007	.002	.050	.016	.022	.008	.003	.002	.006	.003	.002	.001	.000	.000	
1947	5	.101	.024	.043	.022	.008	.003	.034	.009	.013	.008	.003	.001	.003	.001	.001	.000	.000	.000	
1946	6	.077	.014	.030	.021	.008	.004	.021	.005	.008	.005	.002	.001	.002	.001	.001	.001	.000	.000	
1945	7	.057	.009	.020	.015	.008	.005	.010	.002	.003	.002	.001	.001	.000	—	—	—	—	—	
1944	8	.038	.005	.011	.011	.006	.005	.006	.001	.002	.002	.001	.001	—	—	—	—	—	—	
1943	9	.028	.004	.008	.007	.005	.005	.003	.000	.001	.001	.000	.000	—	—	—	—	—	—	
1942	10	.016	.002	.004	.005	.003	.003	.002	.000	.000	.001	.000	.001	—	—	—	—	—	—	
1941	11	.011	.001	.003	.003	.002	.002	.001	.000	.000	.000	.000	.000	—	—	—	—	—	—	
1940	12	.008	.001	.002	.002	.002	.002	.000	—	—	—	—	—	—	—	—	—	—	—	
1939	13	.004	.000	.001	.001	.001	.001	—	—	—	—	—	—	—	—	—	—	—	—	
1938	14	.002	.000	.000	.001	.000	.001	—	—	—	—	—	—	—	—	—	—	—	—	
1937	15	.002	.000	.000	.001	.000	.001	—	—	—	—	—	—	—	—	—	—	—	—	

1953/54

342

1953/54—continued

Calendar year of marriage	Marriage duration in completed years	Age at marriage																	
		30-34								35-39								40-44	
		Number of previous children																	
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more
1953	0	.212	.205	.005	.001	.001	.000	.145	.139	.004	.001	.001	.000	.041	.039	.001	.000	.000	.000
1952	1	.245	.202	.037	.004	.001	.001	.151	.127	.020	.002	.001	.001	.035	.031	.003	.000	.000	.000
1951	2	.174	.087	.075	.009	.002	.001	.101	.054	.041	.005	.001	.001	.020	.013	.005	.001	.000	.000
1950	3	.169	.059	.082	.022	.004	.002	.081	.031	.038	.009	.002	.001	.008	.004	.002	.001	.000	.000
1949	4	.131	.036	.062	.024	.007	.002	.053	.017	.023	.009	.003	.002	.006	.003	.002	.001	.000	.000
1948	5	.105	.025	.045	.023	.009	.003	.034	.009	.013	.008	.003	.001	.003	.001	.001	.000	.000	.000
1947	6	.076	.014	.030	.020	.008	.004	.021	.005	.008	.005	.002	.001	.000	—	—	—	—	—
1946	7	.058	.009	.021	.015	.008	.005	.012	.002	.004	.003	.002	.001	.000	—	—	—	—	—
1945	8	.039	.005	.012	.011	.006	.005	.006	.001	.002	.002	.001	.001	.000	—	—	—	—	—
1944	9	.027	.003	.007	.007	.005	.005	.002	.000	.000	.001	.000	.000	.000	—	—	—	—	—
1943	10	.017	.002	.004	.005	.003	.003	.002	.000	.000	.001	.000	.001	.000	—	—	—	—	—
1942	11	.012	.001	.003	.003	.002	.002	.000	—	—	—	—	—	—	—	—	—	—	—
1941	12	.009	.001	.002	.002	.002	.003	.000	—	—	—	—	—	—	—	—	—	—	—
1940	13	.004	.002	.001	.001	.001	.001	—	—	—	—	—	—	—	—	—	—	—	—
1939	14	.002	.000	.000	.001	.000	.001	—	—	—	—	—	—	—	—	—	—	—	—
1938	15	.002	.000	.000	.000	.000	.001	—	—	—	—	—	—	—	—	—	—	—	—

1954/55

344

1954/55—continued

Calendar year of marriage	Marriage duration in completed years	Age at marriage																	
		30-34				35-39				40-44									
		Number of previous children																	
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more						
1954	0	.218	.211	.005	.001	.001	.000	.145	.139	.004	.001	.001	.000	.042	.040	.001	.000	.000	.000
1953	1	.243	.200	.036	.004	.001	.001	.164	.138	.022	.002	.001	.001	.035	.031	.003	.000	.000	.000
1952	2	.178	.089	.077	.010	.002	.001	.095	.051	.038	.005	.001	.001	.024	.016	.006	.001	.000	.001
1951	3	.155	.054	.076	.020	.004	.002	.075	.028	.035	.008	.002	.001	.007	.004	.002	.001	.000	.000
1950	4	.144	.040	.068	.027	.007	.002	.057	.018	.025	.010	.003	.002	.006	.003	.002	.001	.000	.000
1949	5	.109	.026	.047	.024	.009	.003	.037	.010	.014	.009	.003	.001	.002	.001	.000	.000	.000	.000
1948	6	.076	.014	.030	.020	.008	.004	.020	.005	.007	.005	.002	.001	.000	.001	.000	.000	.000	.000
1947	7	.056	.009	.020	.014	.008	.005	.014	.003	.005	.003	.002	.001	.000	.000	.000	.000	.000	.000
1946	8	.041	.005	.012	.012	.007	.005	.006	.001	.002	.002	.001	.001	.000	.000	.000	.000	.000	.000
1945	9	.030	.004	.008	.007	.005	.005	.002	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000
1944	10	.016	.002	.004	.005	.003	.003	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
1943	11	.013	.001	.003	.003	.003	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
1942	12	.009	.001	.002	.002	.002	.003	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
1941	13	.003	.000	.000	.001	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
1940	14	.002	.000	.000	.001	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
1939	15	.001	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

APPENDIX B—continued

1955/56

Calendar year of marriage	Marriage duration in completed years	Age at marriage																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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		Number of previous children																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	

1955/56—continued

Calendar year of marriage	Marriage duration in completed years	Age at marriage												
		30-34					35-39					40-44		
		Number of previous children												
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	
1955	0	.234	.226	.006	.001	.001	.000	.160	.153	.004	.001	.001	.000	
1954	1	.229	.189	.034	.004	.001	.001	.161	.136	.021	.002	.001	.001	
1953	2	.186	.093	.080	.010	.002	.001	.098	.052	.040	.005	.001	.001	
1952	3	.163	.057	.079	.021	.004	.002	.072	.027	.034	.008	.002	.001	
1951	4	.137	.038	.064	.026	.007	.002	.050	.016	.022	.008	.033	.002	
1950	5	.117	.028	.050	.026	.010	.004	.036	.009	.014	.009	.003	.001	
1949	6	.077	.014	.030	.021	.008	.004	.020	.005	.007	.005	.002	.001	
1948	7	.058	.009	.021	.015	.008	.005	.010	.002	.003	.002	.001	.001	
1947	8	.040	.005	.012	.011	.006	.005	.006	.001	.002	.002	.001	.001	
1946	9	.027	.003	.007	.007	.005	.005	.003	.000	.001	.001	.000	.000	
1945	10	.019	.002	.005	.005	.003	.004	.001	.000	.000	.000	.000	.000	
1944	11	.011	.001	.003	.003	.002	.002	.001	.000	.000	.000	.000	.000	
1943	12	.006	.000	.001	.001	.001	.002	.001	.000	.000	.000	.000	.000	
1942	13	.004	.000	.001	.001	.001	.001	.001	.000	.000	.000	.000	.000	
1941	14	.002	.000	.000	.001	.000	.001	.001	.000	.000	.000	.000	.000	
1940	15	.001	.000	.000	.000	.000	.001	.001	.000	.000	.000	.000	.000	

APPENDIX B—continued 1956/57

Calendar year of marriage	Marriage duration in completed years	Age at marriage																								
		All ages under 45					Under 20					20-24					25-29									
		Number of previous children																								
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more							
1956	0	296	292	004	000	000	000	423	420	003	000	000	000	267	263	003	000	000	000	258	251	005	001	000	000	
1955	1	270	217	050	002	000	000	317	230	085	002	000	000	264	218	043	002	000	000	000	269	224	040	003	001	000
1954	2	230	115	102	012	001	000	277	103	153	020	001	000	228	123	094	010	001	000	000	228	126	091	010	001	000
1953	3	217	077	106	029	004	001	268	066	142	054	006	000	222	087	106	026	003	000	000	204	082	096	022	004	001
1952	4	195	053	094	038	010	002	244	042	114	066	020	002	202	060	097	035	008	001	000	180	054	088	029	007	002
1951	5	169	037	076	039	014	004	214	030	086	062	027	008	178	042	082	038	012	004	000	154	038	072	031	010	003
1950	6	152	026	061	039	017	009	199	021	066	062	033	019	161	030	069	039	016	007	000	136	026	059	032	013	006
1949	7	114	016	041	031	016	011	154	013	043	044	030	023	122	018	047	033	015	010	000	102	016	040	027	012	008
1948	8	097	011	031	027	015	013	139	010	033	040	028	028	105	013	036	029	015	012	000	084	011	030	023	012	008
1947	9	079	007	022	022	014	014	122	007	026	034	026	030	086	008	026	024	014	014	000	069	008	022	019	011	010
1946	10	066	005	016	019	013	014	111	005	020	030	023	034	073	006	018	022	014	014	000	055	005	015	016	010	009
1945	11	057	004	013	016	011	014	091	004	016	022	020	030	062	004	015	017	012	014	000	041	003	010	012	008	009
1944	12	048	003	009	013	010	014	079	003	011	019	017	028	051	003	011	014	010	013	000	033	002	006	009	007	009
1943	13	041	002	007	010	009	013	067	003	009	015	014	026	046	002	009	012	010	013	000	023	001	004	006	004	007
1942	14	034	002	005	009	007	011	063	002	008	015	013	025	039	002	007	010	008	011	000	016	001	003	005	004	004
1941	15	028	001	004	007	006	010	057	001	006	012	012	026	031	001	005	009	007	010	000	012	001	002	003	003	003
1940	16	022	001	003	005	005	009	052	001	005	011	011	025	026	001	004	007	006	009	000	007	000	001	002	002	002
1939	17	018	000	002	004	004	008	049	001	003	009	009	027	021	001	002	005	004	009	000	005	000	001	001	001	002
1938	18	013	000	001	002	003	007	043	000	002	006	008	026	015	000	001	003	003	008	000	003	000	000	001	001	001
1937	19	010	000	001	001	002	006	041	000	002	005	006	028	012	000	001	002	002	007	000	001	000	000	000	000	001
1936	20	007	000	000	001	001	004	034	000	001	003	005	024	008	000	001	001	001	005	000	001	000	000	000	000	001
1935	21	005	000	000	001	001	003	024	000	001	003	003	017	006	000	000	001	001	004	000	001	000	000	000	000	001
1934	22	003	000	000	000	000	002	018	000	001	001	002	013	004	000	000	000	000	001	003	000	000	000	000	000	000
1933	23	003	000	000	000	000	002	014	000	000	001	001	011	002	000	000	000	000	002	000	000	000	000	000	000	000
1932	24	002	000	000	000	000	002	012	000	001	001	001	009	001	000	000	000	000	001	000	000	000	000	000	000	000
1931	25	002	000	000	000	000	002	006	000	000	000	000	005	001	000	000	000	000	001	000	000	000	000	000	000	000

1956/57—continued

Calendar year of marriage	Marriage duration in completed years	Age at marriage															
		30-34					35-39					40-44					
		Number of previous children															
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more				
1956	0	.250	.242	.006	.001	.001	.000	.168	.159	.005	.001	.001	.001	.059	.056	.001	.000
1955	1	.237	.200	.032	.004	.001	.001	.156	.134	.017	.002	.001	.001	.039	.035	.003	.001
1954	2	.191	.098	.080	.010	.002	.001	.109	.060	.043	.005	.001	.001	.022	.015	.006	.001
1953	3	.157	.056	.077	.019	.003	.002	.078	.030	.036	.009	.002	.001	.009	.006	.002	.001
1952	4	.136	.040	.064	.024	.006	.002	.048	.016	.021	.007	.002	.001	.004	.002	.001	.000
1951	5	.109	.028	.046	.023	.008	.003	.030	.007	.011	.008	.002	.001	.002	.000	.001	.000
1950	6	.087	.016	.033	.024	.010	.005	.021	.005	.007	.005	.002	.002	.001	.000	.001	.000
1949	7	.062	.009	.021	.017	.010	.006	.010	.002	.004	.003	.002	.001	.001	.000	.001	.000
1948	8	.038	.004	.011	.012	.006	.005	.006	.001	.002	.002	.002	.001	.001	.000	.001	.000
1947	9	.027	.004	.008	.006	.005	.005	.003	.000	.000	.002	.000	.000	.001	.000	.000	.000
1946	10	.019	.002	.005	.005	.004	.003	.002	.000	.000	.001	.000	.000	.001	.000	.000	.000
1945	11	.013	.001	.003	.004	.003	.002	.002	.000	.000	.000	.000	.000	.001	.000	.000	.000
1944	12	.007	.000	.002	.002	.001	.002	.001	.000	.000	.000	.000	.000	.001	.000	.000	.000
1943	13	.004	.000	.001	.001	.001	.001	.001	.000	.000	.000	.000	.000	.001	.000	.000	.000
1942	14	.002	.000	.000	.000	.001	.001	.001	.000	.000	.000	.000	.000	.001	.000	.000	.000
1941	15	.001	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.001	.000	.000	.000

APPENDIX B—continued

1957/58

Calendar year of marriage	Marriage duration in completed years	Age at marriage																	
		All ages under 45								20-24								25-29	
		Under 20								Number of previous children									
Total		0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	
1957	0	.298	.293	.004	.000	.000	.000	.420	.417	.003	.000	.000	.000	.269	.265	.004	.000	.000	.000
1956	1	.277	.220	.054	.002	.000	.000	.326	.233	.091	.002	.000	.000	.270	.221	.046	.002	.000	.000
1955	2	.237	.116	.108	.012	.001	.000	.284	.106	.156	.021	.001	.000	.237	.126	.100	.010	.001	.000
1954	3	.222	.077	.109	.031	.004	.001	.263	.063	.139	.055	.006	.001	.225	.086	.108	.027	.003	.001
1953	4	.204	.056	.097	.040	.010	.002	.251	.044	.118	.068	.020	.002	.209	.064	.100	.036	.009	.001
1952	5	.177	.039	.079	.041	.015	.005	.219	.030	.087	.064	.029	.009	.186	.045	.086	.039	.013	.004
1951	6	.147	.027	.059	.038	.016	.007	.194	.022	.065	.060	.032	.016	.155	.031	.066	.038	.015	.006
1950	7	.131	.018	.047	.036	.018	.012	.176	.015	.050	.052	.035	.024	.140	.022	.054	.037	.017	.010
1949	8	.099	.012	.032	.028	.015	.013	.141	.009	.034	.041	.029	.029	.106	.014	.036	.029	.015	.012
1948	9	.085	.008	.024	.024	.014	.014	.131	.007	.027	.037	.027	.033	.091	.010	.028	.026	.014	.013
1947	10	.072	.006	.018	.020	.013	.015	.116	.006	.020	.030	.025	.034	.078	.007	.020	.022	.014	.015
1946	11	.058	.004	.012	.015	.011	.015	.098	.004	.015	.024	.021	.034	.064	.004	.015	.017	.012	.016
1945	12	.047	.003	.009	.013	.010	.013	.083	.003	.013	.020	.018	.029	.051	.003	.010	.015	.011	.013
1944	13	.041	.002	.006	.011	.009	.013	.068	.002	.009	.016	.014	.027	.046	.002	.008	.012	.010	.014
1943	14	.035	.001	.005	.009	.007	.012	.061	.002	.008	.014	.012	.026	.040	.002	.006	.010	.008	.014
1942	15	.030	.001	.004	.007	.006	.011	.060	.002	.007	.013	.012	.026	.033	.002	.005	.009	.007	.011
1941	16	.023	.001	.003	.005	.005	.009	.052	.002	.005	.011	.012	.024	.027	.001	.004	.007	.006	.010
1940	17	.018	.001	.002	.004	.004	.008	.048	.001	.004	.009	.010	.024	.021	.001	.003	.005	.005	.008
1939	18	.014	.000	.001	.003	.003	.007	.043	.001	.003	.007	.008	.026	.016	.000	.001	.004	.003	.007
1938	19	.010	.000	.001	.002	.002	.006	.038	.000	.001	.005	.006	.025	.012	.000	.001	.002	.002	.006
1937	20	.008	.000	.000	.001	.001	.005	.034	.000	.001	.004	.006	.023	.008	.000	.001	.001	.002	.005
1936	21	.006	.000	.000	.001	.001	.004	.026	.000	.001	.002	.004	.018	.006	.000	.000	.001	.001	.003
1935	22	.004	.000	.000	.000	.001	.003	.019	.000	.001	.002	.002	.015	.004	.000	.000	.000	.001	.003
1934	23	.003	.000	.000	.000	.000	.002	.014	.000	.000	.000	.001	.002	.002	.000	.000	.000	.000	.002
1933	24	.001	.000	.000	.000	.000	.001	.010	.000	.000	.000	.001	.008	.001	.000	.000	.000	.000	.001
1932	25	.001	.000	.000	.000	.000	.001	.007	—	.000	.001	.001	.006	.001	.000	.000	.000	.000	.000

1957/58—continued

Calendar year of marriage	Marriage duration in completed years	Age at marriage																	
		30-34						35-39						40-44					
		Number of previous children																	
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more
1957	0	.244	.235	.005	.002	.001	.001	.167	.161	.004	.001	.001	.000	.041	.039	.001	—	—	.001
1956	1	.247	.202	.039	.004	.001	.001	.167	.139	.025	.002	.001	.001	.039	.034	.004	.000	—	.001
1955	2	.198	.096	.088	.010	.002	.002	.106	.057	.043	.004	.001	.001	.024	.015	.007	.001	.000	.000
1954	3	.164	.057	.080	.021	.004	.002	.076	.027	.038	.008	.002	.001	.010	.005	.003	.001	.000	.000
1953	4	.141	.039	.066	.027	.007	.002	.048	.015	.021	.008	.002	.002	.004	.002	.002	.000	—	—
1952	5	.114	.025	.050	.025	.010	.004	.035	.010	.013	.008	.003	.001	.002	.001	.001	.000	—	—
1951	6	.084	.016	.033	.022	.008	.005	.019	.005	.008	.004	.001	.001	.000	.001	.001	.000	—	—
1950	7	.071	.012	.025	.018	.010	.006	.015	.003	.006	.003	.002	.001	.000	.000	.000	.000	—	—
1949	8	.044	.006	.013	.012	.007	.006	.005	.001	.002	.002	.001	.001	.000	.000	.000	.000	—	—
1948	9	.030	.004	.009	.007	.005	.005	.003	.001	.001	.001	.001	.000	.000	.000	.000	.000	—	—
1947	10	.019	.002	.005	.007	.003	.003	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	—	—
1946	11	.013	.001	.003	.004	.002	.003	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	—	—
1945	12	.007	.001	.001	.002	.002	.002	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	—	—
1944	13	.004	.000	.000	.001	.001	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	—	—
1943	14	.002	.000	.000	.001	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	—	—
1942	15	.001	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	—	—

APPENDIX B—continued 1958/59

Calendar year of marriage	Marriage duration in completed years	Age at marriage																							
		All ages under 45						Under 20						20-24						25-29					
		Number of previous children																							
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more
1958	0	.320	.315	.004	.001	.000	.000	.433	.430	.003	.000	.000	.000	.276	.272	.004	.000	.000	.000	.275	.267	.006	.001	.001	.000
1957	1	.279	.219	.057	.003	.000	.000	.327	.231	.094	.002	.000	.000	.272	.222	.048	.002	.000	.000	.272	.224	.043	.004	.001	.000
1956	2	.251	.117	.118	.015	.001	.000	.295	.104	.166	.023	.001	.000	.248	.126	.109	.012	.001	.000	.247	.128	.104	.012	.002	.001
1955	3	.226	.075	.113	.033	.004	.001	.265	.061	.141	.056	.007	.000	.229	.085	.112	.028	.003	.001	.222	.083	.109	.026	.004	.002
1954	4	.208	.053	.099	.042	.011	.002	.250	.042	.115	.070	.020	.002	.214	.062	.104	.038	.009	.002	.200	.056	.098	.036	.009	.002
1953	5	.180	.038	.079	.042	.015	.005	.220	.029	.088	.065	.030	.009	.189	.045	.086	.040	.013	.004	.165	.039	.076	.036	.011	.004
1952	6	.151	.026	.060	.040	.017	.008	.195	.020	.065	.060	.033	.017	.160	.030	.067	.040	.015	.007	.135	.027	.057	.033	.013	.006
1951	7	.126	.018	.046	.034	.017	.011	.169	.015	.049	.050	.031	.024	.134	.021	.052	.036	.016	.010	.108	.019	.042	.027	.013	.007
1950	8	.111	.013	.036	.031	.017	.014	.156	.010	.038	.045	.032	.031	.118	.015	.041	.033	.017	.013	.095	.013	.033	.026	.013	.009
1949	9	.086	.008	.024	.024	.015	.015	.128	.007	.026	.033	.028	.034	.091	.010	.027	.026	.015	.013	.071	.009	.021	.021	.010	.010
1948	10	.073	.006	.018	.020	.014	.015	.117	.006	.021	.031	.025	.034	.078	.007	.021	.022	.014	.014	.057	.006	.015	.016	.010	.010
1947	11	.059	.004	.012	.016	.011	.015	.100	.004	.015	.025	.021	.034	.066	.005	.015	.019	.012	.015	.045	.004	.010	.013	.008	.010
1946	12	.049	.003	.009	.013	.010	.015	.085	.003	.011	.020	.017	.033	.056	.003	.011	.016	.011	.015	.035	.002	.008	.009	.007	.009
1945	13	.042	.002	.007	.011	.009	.014	.073	.003	.009	.016	.015	.030	.045	.002	.008	.012	.009	.013	.026	.002	.004	.007	.005	.008
1944	14	.036	.001	.005	.009	.008	.013	.060	.001	.007	.013	.012	.027	.040	.002	.006	.010	.009	.013	.019	.001	.003	.005	.004	.006
1943	15	.030	.001	.003	.007	.006	.012	.055	.002	.005	.012	.011	.025	.034	.001	.004	.008	.007	.012	.012	.000	.001	.003	.003	.004
1942	16	.026	.001	.003	.006	.005	.011	.042	.001	.005	.010	.011	.024	.028	.001	.004	.007	.006	.011	.008	.000	.001	.002	.002	.003
1941	17	.020	.001	.002	.004	.004	.009	.045	.001	.004	.009	.009	.023	.022	.001	.003	.005	.005	.009	.004	.000	.000	.001	.001	.002
1940	18	.014	.000	.001	.003	.003	.006	.039	.001	.003	.007	.008	.020	.016	.000	.002	.004	.004	.007	.003	.000	.000	.001	.001	.001
1939	19	.011	.000	.001	.002	.002	.006	.038	.000	.002	.006	.007	.024	.012	.000	.001	.002	.003	.006	.062	.000	.000	.000	.000	.001
1938	20	.008	.000	.000	.001	.001	.005	.032	.000	.001	.004	.005	.021	.008	.000	.000	.002	.001	.004	.001	.000	.000	.000	.000	.000
1937	21	.005	.000	.000	.001	.001	.003	.028	.000	.001	.003	.004	.020	.005	.000	.000	.001	.001	.003	.001	.000	.000	.000	.000	.000
1936	22	.003	.000	.000	.000	.000	.002	.020	.000	.001	.002	.002	.016	.004	.000	.000	.001	.001	.002	.004	.000	.000	.000	.000	.000
1935	23	.002	.000	.000	.000	.000	.002	.014	.000	.000	.001	.001	.008	.002	.000	.000	.000	.000	.001	.001	.000	.000	.000	.000	.000
1934	24	.001	.000	.000	.000	.000	.001	.010	.000	.000	.001	.001	.008	.001	.000	.000	.000	.000	.001	.001	.000	.000	.000	.000	.000
1933	25	.001	.000	.000	.000	.000	.001	.006	.000	.000	.000	.001	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

1958/59—continued

Calendar year of marriage	Marriage duration in completed years	Age at marriage																	
		30-34					35-39					40-44							
		Number of previous children																	
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more
1958	0	.247	.238	.006	.002	.001	.001	.175	.168	.004	.002	.000	.000	.056	.054	.001	—	—	.000
1957	1	.250	.203	.040	.006	.001	.001	.165	.138	.023	.002	.002	.001	.035	.031	.003	—	.001	.000
1956	2	.212	.104	.090	.012	.003	.002	.120	.062	.049	.007	.001	.001	.021	.015	.004	.001	—	.001
1955	3	.162	.055	.078	.023	.004	.002	.083	.032	.036	.010	.003	.002	.013	.006	.005	.001	—	.001
1954	4	.142	.036	.067	.028	.008	.003	.052	.015	.023	.010	.003	.002	.005	.002	.002	.000	—	—
1953	5	.107	.025	.046	.024	.009	.003	.036	.009	.014	.009	.003	.001	.002	.001	.001	.000	.000	—
1952	6	.085	.015	.033	.023	.009	.005	.021	.004	.008	.006	.002	.001	.002	.001	.001	—	—	—
1951	7	.061	.011	.023	.015	.007	.005	.012	.002	.003	.003	.002	.001	.002	.001	.001	—	—	—
1950	8	.050	.007	.015	.013	.008	.006	.006	.000	.001	.002	.001	.001	.002	.001	.001	—	—	—
1949	9	.029	.004	.008	.008	.005	.005	.004	.001	.001	.001	.000	.001	.002	.001	.001	—	—	—
1948	10	.020	.002	.005	.005	.004	.004	.001	.000	.000	.000	.000	.000	.002	.001	.001	.000	.000	—
1947	11	.012	.001	.003	.003	.002	.003	.001	.000	.000	.000	.000	.000	.002	.001	.001	—	—	—
1946	12	.007	.001	.002	.002	.001	.002	.001	.000	.000	.000	.000	.000	.002	.001	.001	—	—	—
1945	13	.004	.000	.001	.001	.001	.001	.001	.000	.000	.000	.000	.001	.002	.001	.001	—	—	—
1944	14	.003	.000	.001	.001	.000	.001	.001	.000	.000	.000	.000	.001	.002	.001	.001	—	—	—
1943	15	.001	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.002	.001	.001	.000	.000	—

APPENDIX B—continued

1959/60

Calendar year of marriage	Marriage duration in completed years	Age at marriage																															
		All ages under 45						Under 20						20-24						25-29													
		Number of previous children																															
		0		1		2		3		4 or more		Total		0		1		2		3		4 or more		Total		0		1		2		3		4 or more
1959	0	314	309	004	000	000	000	000	439	435	004	000	000	000	277	274	004	000	000	000	000	000	277	269	006	001	000	000	000	000	000	000	
1958	1	285	219	062	003	000	000	000	331	226	102	002	000	000	280	276	052	002	000	000	000	000	280	229	046	004	001	001	001	001	001	001	
1957	2	252	114	122	015	001	000	000	297	102	170	024	001	000	246	122	116	013	001	000	000	000	251	124	111	013	002	001	001	001	001	001	
1956	3	234	075	119	035	005	001	000	267	059	144	057	007	000	237	085	118	029	004	001	000	000	231	082	114	029	005	005	005	005	005	005	
1955	4	207	050	100	044	011	002	000	235	037	109	067	020	003	216	059	106	040	001	002	000	000	196	053	096	036	009	009	009	009	009	009	
1954	5	184	037	080	045	017	005	000	221	028	087	067	031	009	192	044	087	043	014	004	004	004	172	038	077	040	013	013	013	013	013	013	
1953	6	154	025	062	041	018	008	019	191	018	066	057	033	017	163	030	069	041	016	007	013	013	137	026	058	034	013	013	013	013	013	013	
1952	7	129	018	046	036	018	011	016	169	014	049	050	032	023	137	020	053	038	017	010	010	010	113	019	043	030	013	013	013	013	013	013	
1951	8	104	012	033	030	016	013	013	148	011	035	044	029	029	111	015	038	031	015	012	012	012	088	013	043	024	013	013	013	013	013	013	
1950	9	095	009	026	027	016	016	016	138	007	027	040	029	035	102	011	030	030	017	015	015	015	078	009	024	022	012	012	012	012	012	012	
1949	10	074	006	018	021	013	016	016	116	005	019	030	025	036	080	007	022	023	014	015	015	015	056	006	011	016	009	009	009	009	009	009	
1948	11	060	004	013	016	011	015	015	099	005	015	024	020	035	066	005	015	019	012	015	015	046	004	011	013	008	008	008	008	008	008	008	
1947	12	051	003	009	013	010	015	015	089	003	011	021	020	034	056	004	011	015	011	015	015	035	003	007	009	007	007	007	007	007	007	007	
1946	13	041	002	006	010	008	014	014	074	002	008	016	015	033	047	002	008	012	010	015	015	027	002	004	007	006	006	006	006	006	006	006	
1945	14	034	001	005	008	007	012	012	063	002	007	013	013	028	038	002	006	010	008	013	013	018	001	003	005	004	004	004	004	004	004	004	
1944	15	030	001	004	007	007	012	012	057	002	005	011	013	026	033	001	004	008	008	012	012	012	012	001	002	003	002	002	002	002	002	002	
1943	16	025	001	003	005	005	011	011	048	002	005	009	010	024	028	001	003	007	006	012	012	006	000	001	002	001	001	001	001	001	001	001	
1942	17	020	001	002	004	004	009	009	043	001	004	009	008	021	023	001	003	005	005	009	009	005	005	000	001	001	001	001	001	001	001	001	
1941	18	015	000	001	003	003	007	007	038	001	003	006	007	021	017	000	002	004	004	008	008	003	000	000	000	001	000	000	000	000	000	000	000
1940	19	012	000	001	002	002	006	006	036	001	003	006	007	021	013	000	001	003	002	006	006	002	000	000	000	000	000	000	000	000	000	000	000
1939	20	009	000	001	001	002	005	005	032	000	002	004	005	021	008	000	001	002	002	005	005	001	001	000	000	000	000	000	000	000	000	000	000
1938	21	006	000	000	001	001	004	004	026	000	001	003	004	018	006	000	000	001	001	003	003	001	000	000	000	000	000	000	000	000	000	000	000
1937	22	003	000	000	000	000	002	002	022	000	001	002	003	016	003	000	000	000	001	002	002	000	000	000	000	000	000	000	000	000	000	000	000
1936	23	002	000	000	000	000	001	001	013	000	001	001	002	010	002	000	000	000	000	001	001	000	000	000	000	000	000	000	000	000	000	000	000
1935	24	002	000	000	000	000	002	002	010	—	000	001	001	009	001	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000
1934	25	000	000	000	000	000	000	000	005	000	000	000	001	005	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000

1959/60—continued

Calendar year of marriage	Marriage duration in completed years	Age at marriage												
		30-34					35-39					40-44		
		Number of previous children												
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	
1959	0	-264	-252	-008	-002	-001	-001	-181	-174	-004	-001	-001	-001	-053
1958	1	-257	-211	-040	-004	-001	-001	-179	-150	-024	-003	-001	-001	-045
1957	2	-206	-097	-093	-011	-033	-002	-128	-064	-052	-009	-002	-001	-020
1956	3	-177	-058	-087	-026	-004	-002	-081	-029	-038	-011	-002	-001	-011
1955	4	-138	-033	-063	-031	-007	-004	-060	-016	-024	-015	-003	-002	-006
1954	5	-112	-023	-048	-027	-010	-004	-036	-009	-014	-009	-003	-002	-002
1953	6	-086	-017	-031	-023	-010	-006	-020	-003	-019	-005	-002	-001	-002
1952	7	-065	-011	-022	-017	-008	-006	-012	-003	-003	-002	-002	-001	-001
1951	8	-046	-006	-015	-013	-006	-006	-005	-001	-001	-002	-001	-001	-001
1950	9	-036	-004	-010	-009	-006	-007	-004	-001	-001	-001	-001	-001	-001
1949	10	-021	-003	-004	-005	-004	-005	-001	-001	-000	-000	-000	-000	-000
1948	11	-011	-001	-003	-003	-002	-003	-001	-001	-000	-000	-000	-000	-000
1947	12	-008	-001	-001	-002	-002	-003	-001	-001	-000	-000	-000	-000	-000
1946	13	-003	-000	-000	-001	-001	-001	-001	-001	-000	-000	-000	-000	-000
1945	14	-001	-000	-000	-000	-000	-001	-001	-000	-000	-000	-000	-000	-000
1944	15	-001	-000	-000	-000	-000	-000	-001	-000	-000	-000	-000	-000	-000

APPENDIX B—continued 1960/61

Calendar year of marriage	Marriage duration in completed years	Age at marriage																																							
		All ages under 45								Under 20								20-24								25-29															
		0				1				2				3				4 or more				0				1				2				3				4 or more			
		Total	0	1	2	Total	0	1	2	Total	0	1	2	Total	0	1	2	Total	0	1	2	Total	0	1	2	Total	0	1	2	Total											
1960	0	328	322	005	001	000	000	000	468	463	004	000	000	000	000	000	000	283	278	005	000	000	000	000	000	000	000	000	000	000	291										
1959	1	285	220	065	003	000	000	000	330	222	104	003	000	000	000	000	000	281	223	054	003	000	000	000	000	000	000	000	000	000	289										
1958	2	265	117	129	017	001	000	000	303	102	174	026	001	000	000	000	000	261	128	118	014	001	000	000	000	000	000	000	000	000	264										
1957	3	249	078	126	039	005	001	000	282	061	150	062	008	000	000	000	000	251	089	125	032	004	001	000	000	000	000	000	000	000	248										
1956	4	219	052	104	048	012	002	000	249	039	112	073	021	003	000	000	000	226	061	110	043	010	002	000	000	000	000	000	000	000	208										
1955	5	191	036	083	048	018	006	000	219	028	082	069	031	009	000	000	000	201	043	092	046	015	005	000	000	000	000	000	000	000	179										
1954	6	161	025	063	044	019	009	000	197	019	063	062	035	018	000	000	000	168	023	070	043	017	008	000	000	000	000	000	000	000	148										
1953	7	134	018	048	038	019	012	000	169	014	047	053	031	024	000	000	000	142	021	054	039	018	010	000	000	000	000	000	000	000	118										
1952	8	116	013	036	033	018	015	000	160	011	038	047	032	032	000	000	000	122	015	042	035	018	013	000	000	000	000	000	000	000	098										
1951	9	092	009	026	026	016	015	000	134	008	027	037	028	033	000	000	000	098	011	030	028	015	013	000	000	000	000	000	000	000	077										
1950	10	087	007	021	024	016	019	000	135	006	023	035	030	041	000	000	000	092	008	024	027	016	017	000	000	000	000	000	000	000	069										
1949	11	064	004	013	018	013	016	000	105	004	016	026	023	037	000	000	000	068	005	016	019	013	015	000	000	000	000	000	000	000	046										
1948	12	055	003	010	015	011	016	000	094	003	012	022	019	037	000	000	000	060	004	012	017	011	015	000	000	000	000	000	000	000	038										
1947	13	044	002	007	011	009	015	000	081	003	010	017	017	034	000	000	000	050	003	009	013	010	015	000	000	000	000	000	000	000	029										
1946	14	036	001	005	009	008	013	000	070	002	007	014	015	031	000	000	000	042	002	006	011	009	014	000	000	000	000	000	000	000	020										
1945	15	030	001	004	007	006	012	000	060	001	006	012	013	029	000	000	000	033	001	004	008	007	012	000	000	000	000	000	000	000	013										
1944	16	026	001	003	005	005	012	000	053	001	004	010	011	027	000	000	000	027	001	003	006	006	012	000	000	000	000	000	000	000	010										
1943	17	022	001	002	005	005	010	000	044	001	003	009	009	022	000	000	000	025	001	002	006	005	011	000	000	000	000	000	000	000	006										
1942	18	017	000	002	003	004	008	000	042	001	003	007	009	022	000	000	000	018	001	002	004	004	008	000	000	000	000	000	000	000	003										
1941	19	013	000	001	003	003	007	000	036	001	002	006	006	022	000	000	000	013	000	001	003	003	006	000	000	000	000	000	000	000	002										
1940	20	009	000	001	002	002	005	000	031	001	002	005	005	019	000	000	000	009	000	001	002	002	004	000	000	000	000	000	000	000	001										
1939	21	006	000	000	001	001	004	000	027	000	001	003	004	018	000	000	000	006	000	000	000	001	001	003	000	000	000	000	000	000	000										
1938	22	004	000	000	000	000	001	003	020	000	001	002	003	015	000	000	000	004	000	000	000	000	001	002	000	000	000	000	000	000	000										
1937	23	002	000	000	000	000	000	001	016	000	001	001	002	012	000	000	000	002	000	000	000	000	000	001	002	000	000	000	000	000	000										
1936	24	001	000	000	000	000	000	001	011	000	000	001	001	008	000	000	000	001	000	000	000	000	000	000	000	000	000	000	000	000	000										
1935	25	001	—	000	000	000	000	001	006	—	000	000	000	005	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000	000										

1960/61—continued

Calendar year of marriage	Marriage duration year completed years	Age at marriage																	
		30-34						35-39						40-44					
		Number of previous children																	
		Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more	Total	0	1	2	3	4 or more
1960	0	.265	.250	.008	.003	.002	.001	.182	.168	.006	.004	.001	.002	.071	.064	.002	.001	.002	.002
1959	1	.261	.207	.043	.007	.002	.002	.171	.139	.026	.004	.001	.001	.045	.037	.005	.001	.002	.001
1958	2	.218	.101	.022	.003	.002	.002	.124	.055	.056	.009	.002	.001	.024	.016	.007	.001	.001	.000
1957	3	.183	.087	.091	.027	.006	.003	.093	.032	.042	.014	.003	.003	.011	.004	.005	.001	.000	.000
1956	4	.150	.035	.069	.032	.009	.005	.060	.016	.026	.012	.003	.003	.008	.003	.002	.002	.001	.000
1955	5	.119	.023	.049	.030	.012	.005	.040	.008	.017	.011	.002	.002	.001	.001	.000	.001	.000	.000
1954	6	.090	.017	.034	.022	.011	.006	.023	.004	.008	.006	.003	.002	.002	.001	.000	.001	.001	.001
1953	7	.067	.010	.023	.017	.010	.006	.012	.002	.003	.004	.002	.001	.000	.000	.000	.000	.000	.000
1952	8	.055	.008	.016	.014	.009	.006	.006	.001	.002	.001	.002	.002	—	—	—	—	—	—
1951	9	.030	.004	.009	.007	.005	.005	.002	.000	.001	.001	.000	.000	—	—	—	—	—	—
1950	10	.025	.003	.005	.006	.005	.005	.002	.001	.000	.000	.000	.001	—	—	—	—	—	—
1949	11	.013	.001	.003	.003	.003	.003	.001	.000	.000	.000	.000	.001	—	—	—	—	—	—
1948	12	.008	.001	.001	.002	.001	.002	.001	.000	.000	.000	.000	.000	—	—	—	—	—	—
1947	13	.004	.000	.001	.001	.001	.001	.001	—	—	—	—	—	—	—	—	—	—	—
1946	14	.002	.000	.000	.001	.000	.001	—	—	—	—	—	—	—	—	—	—	—	—
1945	15	.001	.000	.000	.000	.000	.001	—	—	—	—	—	—	—	—	—	—	—	—
1944	16	.001	.000	.000	.000	.000	.000	—	—	—	—	—	—	—	—	—	—	—	—
1943	17	.000	—	—	—	—	.000	—	—	—	—	—	—	—	—	—	—	—	—

APPENDIX C

PERSONS MARRYING IN 1961 BY AGES AND MARITAL CONDITIONS IN COMBINATION, ENGLAND AND WALES

Note—Each horizontal line shows the age distribution of husbands who married wives of a given age, each vertical column shows the age distribution of wives who married husbands of a given age

Table 1. All persons marrying

		Ages of all husbands																Total								
		Ages of all wives																								
		16	17	18	19	20	21	22	23	24	Under 20	20–	25–	30–	35–	40–	45–		50–	55–	60–	65–	70–	75–	80–	85 and over (21 and over)
16	166	575	1,042	1,153	965	815	529	375	217	2,936	2,901	342	55	12	1	—	—	—	—	—	—	—	—	—	5	
17	83	699	1,711	2,463	2,380	2,396	1,683	1,249	825	4,956	8,533	1,191	182	44	8	5	—	—	—	—	—	—	—	—	5	
18	70	416	1,681	3,256	4,372	5,263	4,054	3,299	2,183	5,423	19,171	3,489	479	102	25	12	5	1	—	—	—	—	—	—	5	
19	17	173	841	2,901	5,110	7,726	6,343	5,183	3,794	3,932	28,156	6,343	923	217	35	16	10	1	—	—	—	—	—	—	6	
20	2	61	397	1,529	4,037	7,279	6,846	5,936	4,735	1,989	28,833	8,384	1,286	266	68	25	7	5	2	—	—	—	—	—	7	
21	1	30	215	839	2,422	6,663	7,328	7,054	5,907	1,085	29,374	12,057	2,108	484	122	49	16	8	4	—	—	—	—	—	4	
22	2	18	91	365	1,001	3,150	4,874	5,155	4,854	476	19,034	10,802	2,252	500	136	57	18	3	1	—	—	—	—	—	1	
23	1	6	40	199	488	1,520	2,444	3,675	3,607	246	11,734	9,351	2,194	541	184	57	18	10	1	2	—	—	—	—	1	
24	—	—	5	91	262	764	1,218	1,901	2,469	112	6,614	7,365	2,168	643	177	71	27	9	4	1	—	—	—	—	2	
Under 20	336	1,863	5,275	9,773	12,827	16,200	12,609	10,106	7,019	17,247	58,761	11,365	1,639	375	69	33	19	2	1	1	—	—	—	—	16	
20–	6	120	759	3,023	8,210	19,376	22,710	23,721	21,572	3,908	95,589	47,960	10,008	2,434	687	259	86	35	12	3	—	—	—	—	14	
25–	1	4	41	123	330	920	1,471	2,333	3,169	169	8,223	17,180	8,710	3,545	1,218	496	58	24	7	4	—	—	—	—	3	
30–	—	—	5	14	33	97	168	285	365	19	948	3,759	5,040	3,564	1,724	886	373	159	57	14	5	2	1	—	—	
35–	1	1	—	4	12	20	28	54	81	6	195	830	1,939	2,813	2,077	1,387	748	300	140	50	16	10	2	—	—	
40–	—	—	—	—	3	7	6	12	22	—	50	191	604	1,320	1,690	1,417	1,087	599	270	88	33	15	2	—	—	
45–	—	—	—	—	—	—	—	—	—	—	19	78	235	573	879	1,503	1,488	1,088	561	249	100	23	11	3	—	
50–	—	—	—	—	—	1	5	8	5	—	2	15	53	147	345	693	1,185	1,239	812	375	182	53	14	4	—	
55–	—	—	—	—	—	—	—	—	—	—	1	3	13	35	79	206	517	986	909	509	243	97	21	7	—	
60–	—	—	—	—	—	—	—	—	—	—	3	5	5	61	32	56	186	423	805	756	417	168	58	8	—	
65–	—	—	—	—	—	—	—	—	—	—	—	—	—	2	6	19	45	120	273	587	475	205	76	7	—	
70–	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	4	6	18	54	160	316	190	49	13	—	
75–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	2	3	15	21	54	95	40	3	—	
80–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	9	15	14	7	—	
85 and over (21 and over)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Age not stated (21 and over)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	344	1,988	6,080	12,938	21,419	36,629	37,004	36,524	32,241	21,350	163,817	81,305	28,253	14,820	8,813	6,967	5,939	5,033	3,936	2,826	1,859	874	271	55	560	346,678

Table 2. Bachelors marrying spinsters

[illegible]

APPENDIX C—continued

Table 3. Bachelors marrying widowed and divorced women

Ages of bachelors																										
	16	17	18	19	20	21	22	23	24	Under 20	20–	25–	30–	35–	40–	45–	50–	55–	60–	65–	70–	75–80–	85 and over	Age not stated (21 and over)	Total	
Ages of widowed and divorced women	18	—	—	1	1	—	—	1	—	1	6	1	—	—	—	—	—	—	—	—	—	—	—	—	2	
	19	—	—	1	3	—	—	—	—	1	—	5	—	—	—	—	—	—	—	—	—	—	—	—	13	
	20	—	—	1	4	3	—	6	4	1	20	6	—	—	—	—	—	—	—	—	—	—	—	—	27	
	21	—	—	1	5	11	3	20	9	2	46	28	10	—	—	—	—	—	—	—	—	—	—	—	89	
	22	—	—	1	7	33	27	33	25	5	103	92	28	3	—	—	—	—	—	—	—	—	—	—	239	
	23	—	1	2	8	27	36	48	14	14	142	148	45	15	5	2	1	1	—	—	—	—	—	—	370	
	24	—	1	2	3	30	25	46	66	5	178	195	66	24	4	1	—	—	—	—	—	—	—	—	473	
	Under 20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15	
	20–	2	2	4	21	31	72	99	135	152	27	489	469	149	49	9	—	—	—	—	—	—	—	—	1,198	
	25–	—	1	4	26	49	104	130	189	238	31	710	1,253	681	281	81	23	2	3	—	—	—	—	—	3,066	
30–	—	—	2	6	25	55	88	95	123	8	270	829	936	560	200	62	25	3	2	—	—	—	—	2,902		
35–	1	1	1	3	5	9	17	31	45	5	107	359	611	665	417	166	65	13	2	1	—	—	—	2,410		
40–	—	—	—	—	3	4	6	9	14	—	36	116	298	486	449	249	124	48	12	1	1	—	—	1,820		
45–	—	—	—	—	—	1	4	7	3	—	15	52	143	303	312	348	182	76	23	7	1	—	—	1,462		
50–	—	—	—	—	—	—	—	1	—	—	1	9	30	95	139	185	217	140	38	20	4	3	—	869		
55–	—	—	—	—	—	—	—	—	—	—	—	2	6	23	39	72	123	129	50	28	3	—	—	467		
60–	—	—	—	—	—	—	—	—	—	—	—	2	—	5	19	26	60	75	37	33	9	3	2	314		
65–	—	—	—	—	—	—	—	—	—	—	—	—	1	1	4	13	22	25	37	33	16	5	2	159		
70–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	6	15	19	17	6	2	69		
75–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	6	3	3	3	1	—	20	
80–	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	
85 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Age not stated (21 and over)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	1	4	10	58	98	218	311	461	547	73	1,635	3,100	2,860	2,470	1,672	1,151	824	527	262	125	53	23	7	3	40	14,825

Ages of widowed and divorced women

mf
732

362

(88341) Wt. 2761/542 K.8 1/64 Hw.

